

Mahatma Education Society's
Pillai HOC College of Arts, Science and Commerce, Rasayani
(Accredited by NAAC & ISO 9001:2015 Certified)

3.2. QIM.

Innovation Ecosystem

(FROM AY 2017-18 TO AY 2021-22)



Datam
Principal
Mahatma Education Society's
Pillai's HOC College of Arts
Science and Commerce
HOC Educational Campus,
Rasayani, Tal. Khalapur,
Dist. Raichur, PIN - 410 207

**Mahatma Education Society's
Pillai HOC College of Arts, Science and Commerce, Rasayani
(Accredited by NAAC & ISO 9001:2015 Certified)**

3.2.1 QIM.

Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge (patents filed, published, incubation center facilities in the HEI to be considered)

(FROM AY 2017-18 TO AY 2021-22)



महाराष्ट्र MAHARASHTRA

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ZS 389725

25 MAR 2022

धुरवठ्याचा दिनांक
उपकोषागारा। नांदे-भनदेल,
जि. रायगड.

उप कोषागार अधिकारी
भनदेल - रायगड



(RSV)

जोडपत्र-१ / Annexure - 1
रकत प्रतिगणनासाठी

मुद्रक विक्री नोंदवही अनुक्रमांक 604 दिनांक 06/04/2022
मुद्रक विक्रीत घेणाऱ्याचे नांव महात्मा एज्युकेशन सोसायटी
सहवाशी पत्ता न राशी रसायनी
हस्त केलेल्यास स्वामी नांव, पत्ता न राशी पद्मभानुभन वणमिह

परवानगीसाठी मुद्रक विक्रीत घेणाऱ्याचे पत्ता
जि. रायगड, नांदे-भनदेल, उपकोषागारा, रायगड
पत्तेस अनुक्रमी - पत्तेस २१ - २७
(सी. सुजित विठ्ठल परदेशी)
सह्य वेडर
चा कार्यालयात घेणाऱ्या मुद्रक खरेदी - २७ रुपये रकम घेणाऱ्यांनी मुद्रक खरेदी घेणाऱ्यांना
पत्तेस वाचने घेऊन घ्यावे.

MEMORANDUM OF UNDERSTANDING
(MoU)



Between
Research and Innovation Cell,
Mahatma Education Society's
Pillai HOC College of Arts, Science and Commerce, Rasayani

And
Dnyan Foundation, Nagpur



Mahatma Education Society's

College Code: 870

PILLAI HOC COLLEGE OF ARTS, SCIENCE & COMMERCE

Pillai HOCL Educational Campus, HOC Colony, Rasayani, Via. Panvel, Dist. Raigad. Pin 410207
Tel: 02192 - 669000 / 01 / 02 / 03 / 04 / 05 / 06 / 07 / 08 / 09

Website : www.phcasc.ac.in Email : phcasc@mes.ac.in

Affiliated to the University of Mumbai, Approved by Government of Maharashtra

This Memorandum of Understanding (MoU) is entered into on the 30th of March 2022 Between Pillai HOC College of Arts, Science and Commerce, Rasayani run by Mahatma Education Society having its registered office at Pillai HOCL Educational Campus, HOC Colony, Mohopada, Rasayani, hereinafter referred to as "PHCASC" and Dnyan Foundation, an NGO which is located at Nirmitti Elite, Near Rama Nagar, Badil Kheda, Nagpur, Maharashtra 440027 hereinafter referred to as "Dnyan Foundation" with regards to conducting of various research and patent related activities/workshops to be functional for a period of three academic years from this day on (till 30th March 2025).

General Objective:

This Memorandum of Understanding (MoU) between PHCASC and Dnyan Foundation is to stimulate and facilitate the development of collaborative and mutually beneficial research programmes and activities which serve to benefit the students and faculty in the area of research.

Areas and Modes of Collaboration

Mahatma Education Society's Pillai HOC College of Arts, Science and Commerce, Rasayani and Dnyan Foundation, Nagpur, have agreed that in support of their mutual interest in providing practical education system and developing research skills of students, both the parties will have following understandings:

1. To promote research work in participating institutions.
2. To exchange information on research programmes.
3. To provide practical education system.
4. To develop research skills of students and faculty members.
5. To organize events, seminars, conferences or workshops on research and patents.
6. To promote research culture among students and faculty members.

Amendments/Modifications

This MoU may be amended or modified by a written agreement signed by the representatives of both the institutes.

Adherence of Laws

Participating teaching staff and students involved in any activities under this memorandum must adhere to the law, rules and regulations of the host institutions.

Legal Effect

Nothing in this Memorandum shall be construed as creating any legal relationship between the parties. This Memorandum is a statement of intent for mutually beneficial collaboration. In case, there is a dispute relating to any aspect of academic cooperation, the parties will jointly resolve the dispute in a spirit of independence, mutual respect, and shared responsibility.

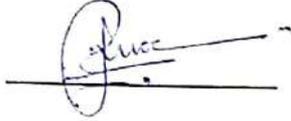
Duration of the MoU

This MoU, unless extended by mutual written consent of the institutes, shall expire in three years after the effective date specified in the opening paragraph. However, on review, the MoU may be renewed by mutual consent.

This MOU is at will and may be modified by mutual consent of both the parties. This MOU shall become effective upon signature by the authorized signatories from both the parties and will remain in effect until modified or terminate by any one of the parties or by mutual consent.

Signed

By Dr. Ajinkya Ravindra Kottawar
Founder & President of Dnyan Foundation



(Signature)

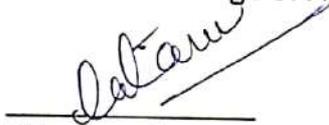


Signed

By Dr. Lata Menon

Principal

Pillai HOC College of Arts, Science and Commerce, Rasayani



(Signature)

Principal
Mahama Education Society's
Pillai's HOC College of Arts
Science and Commerce
HOC Educational Campus,
Rasayani, Tal. Khalapur,
Dist. Rajgad, PIN - 410 207



FORM 2
THE PATENT ACT 1970 &
The Patents Rules, 2003
COMPLETE SPECIFICATION
(See section 10 and rule 13)

TITLE OF THE INVENTION:

Bitcoin Price Quick Prediction Using AI, DL and ML

Name	Nationality	Address
Dr. Monica Shrivastava (Associate Professor)	AN INDIAN NATIONAL	FACULTY OF MANAGEMENT STUDIES, SHRI SHANKARACHARYA TECHNICAL CAMPUS, BHILAI, CHHATTISGARH, 490020, INDIA. Mobile: 9893081129 Email id: monicasv.03@gmail.com
Prof.(Dr.) Prashant Singh	AN INDIAN NATIONAL	DEPARTMENT OF INFORMATION TECHNOLOGY, DR. AKHILESH DAS GUPTA INSTITUTE OF TECHNOLOGY & MANAGEMENT, NEW DELHI, INDIA.
Veer Bhadra Pratap Singh, (Assistant Professor)	AN INDIAN NATIONAL	DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, KRISHNA ENGINEERING COLLEGE, 95, LONI ROAD, BETWEEN MOHAN NAGAR & AIR FORCE STATION-HINDON, GHAZIABAD, UP- 201007, INDIA.
Dr. Lata Menon	AN INDIAN NATIONAL	MAHATMA EDUCATION SOCIETY'S PILLAI HOC COLLEGE OF ARTS, SCIENCE AND COMMERCE, RASAYANI TALUKA KHALAPUR DISTRICT RAIGAD MAHARASHTRA 410207, INDIA. E-mail: latak@mes.ac.in
Mr. Ravi Bari	AN INDIAN NATIONAL	MAHATMA EDUCATION SOCIETY'S PILLAI HOC COLLEGE OF ARTS, SCIENCE AND COMMERCE, RASAYANI TALUKA KHALAPUR DISTRICT RAIGAD MAHARASHTRA 410207, INDIA.
Ms. Neethumol K G	AN INDIAN NATIONAL	MAHATMA EDUCATION SOCIETY'S PILLAI HOC COLLEGE OF ARTS, SCIENCE AND COMMERCE, RASAYANI TALUKA KHALAPUR DISTRICT RAIGAD MAHARASHTRA 410207, INDIA.

REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

FIELD OF THE INVENTION

Our Invention is related to a Bitcoin Price Quick Prediction Using AI, DL and ML.

BACKGROUND OF THE INVENTION

Virtual monetary standards become the most ideal and utilized for business venture exchanges everywhere. The prominence is because of its creative qualities like straightforwardness, effortlessness, and expanding acknowledgment through the world. In the current time, bitcoin is the well-known prospering virtual money. Answered to the site <https://bitcoin.org>, saw on April 19, 2019, the virtual cash market esteem is near 90 billions of dollars, however it shifts every once in a while. Bitcoin is a distributed digital currency where all exchanges are not directed or constrained by any outsider. Outsider intercession between clients is outlandish.

It is exceptionally unpredictable market value working day in and day out. Market capitalization of bitcoin is expanded through an ideal opportunity to time. In the current time, in excess of 71 billion of dollars' public. Because of its open-source nature, clear, straightforward, basic, and time is saving which drives all virtual monetary forms on the planet. Bitcoin is a worldwide and most famous digital money, first presented in 2008 and took advantage of as open source in 2009 by an individual called Satoshi Nakamoto, yet it turned out to be profoundly well known in 2017.

Bitcoin capacities as a decentralized moderate of electronic money, with exchanges demonstrated and interpreted in a public appropriated record (blockchain) with next to no outsider intercession. Exchange blocks comprise of secure shell calculation which is utilized to interface one another, and blocks are filled in as a non-editable information which is recorded when the exchange is being held. Then, at that point, any virtual cash particularly bitcoin has been embraced by individuals, and the virtual money market pattern has been growing up.

The prominence of bitcoin is expanded inside a brief timeframe. Various advancements and business organizations are gotten together with bitcoin. As various specialists guaranteed that after 2015 around 100,000 innovation and business organizations have begun the bitcoin market. A portion of the famous organizations which are gotten together with bitcoin are Amazon, Microsoft, Overstock, Dell, and others.

Many works have been done to anticipate time series, just as BTC esteem. Notwithstanding, any profound learning models have not been quite utilized at this point to anticipate the BTC value esteem. Realizing the profound learning models become best in class neural organization design that further develops expectation exactness in different spaces including time series, we consider utilizations of profound figuring out how to anticipate the BTC value esteem. In coming segments, we will investigate past works done on BTC value forecast, talk about profound learning models to anticipate the time series, and spotlight on three fundamental articles which will fill in as establishment of our work.

OBJECTIVES OF THE INVENTION

- 1) The objective of the invention is to provide a “Bitcoin Price Quick Prediction Using AI, DL and ML “is a Digital currency are a computerized method of cash wherein all exchanges are held electronically.
- 2) The other objective of the invention is to provide a delicate money which doesn't exist as hard notes truly. Here, we are underscoring the distinction of fiat cash which is decentralized that with practically no outsider intercession all virtual money clients can get the administrations.
- 3) The other objective of the invention is to provide a Notwithstanding, getting administrations of these digital currencies impacts on global relations and exchange, because of its excessive cost unpredictability. There are a few virtual monetary forms, for example, bitcoin, swell, ethereum, ethereum exemplary, light coin, and so on in our review, we particularly centered around a well-known digital money, i.e., bitcoin.
- 4) The other objective of the invention is to provide a many sorts of virtual monetary forms, bitcoin has an extraordinary acknowledgment by various bodies like financial backers, scientists, brokers, and strategy creators. As far as we could possibly know, our objective is to carry out the effective profound learning-based forecast models explicitly long momentary memory (LSTM).
- 5) The other objective of the invention is to provide a gated intermittent unit (GRU) to deal with the value unpredictability of bitcoin and to acquire high exactness. Our review includes looking at these double cross series profound learning strategies and demonstrated the viability in estimating the cost of bitcoin.

SUMMARY OF THE INVENTION

The proposed technique considers two unique profound learning-based expectation models to figure every day cost of bitcoin by distinguishing and assessing significant components by the actual model. Subsequent to applying both the models for bitcoin forecast, we can figure out which model is considerably more exact for the future satisfaction of our objective and select proper boundaries to get a superior presentation.

In this work, we have proposed profound learning instruments, for example, LSTM and GRU which are the most recent and proficient strategies at the determining of bitcoin cost. As bitcoin is the most well-known digital currency, the value unpredictability issue ought to be taken care of inside a brief timeframe. The course of expectation beginning from gathering information till the determining of bitcoin cost is portrayed.

Information readiness is the most common way of gathering, joining, arranging, and organizing information, and afterward it tends to be considered as information

perception, investigation, and information mining with AI applications. It is basic to take care of exact information for the issue we need to settle. Informational collection planning is a critical stage in AI. As we referenced previously, the information arrangement impacts the exactness of the forecasts. Consequently, in this part, we ought to clarify the subtleties of the informational collections.

We will uncover the techniques used to set up the information in extent of our model. The dataset utilized for this examination comprises of day by day value esteem gathered from Kaggle site <https://www.kaggle.com>. The general information assortment period is from January 1, 2014 to February 20, 2018. In this dataset, there are seven credits like opening value, excessive cost, low cost, and shutting costs and furthermore the market cap of public exceptional offers.

The cryptographic money market has been grown quickly and conflictingly with extraordinary speed during its short life expectancy. After the appearance of the cutting edge untamed digital currency, Bitcoin, in January 2009, a larger number of than 1200 cryptographic forms of money have been presented with most of them showing humble achievement. The unpredictability of this market presents critical exploration challenges and legitimizes serious assessment of its conduct.

This proposition endeavors to give an extensive information examination of the digital currency market. For this, we create and apply factual and AI methods to break down the value development of explicit digital currencies and produce derivations. In particular, we use a relationship investigation of the information and apply AI calculations to anticipate the end cost of the digital currency Ethereum in a brief period. The value information is aggregated from Polonies trade and Quandl stage.

For the examination of the information got, we have executed and applied a Convolutional Neural Network (CNN), with changing quantities of layers and two sorts of Recurrent Neural Network (RNN), the Long Short Term Memory (LSTM) organization and Gated Recurrent Unit (GRU) organization. The above profound learning models are benchmarked and analyzed using different measurements. We have seen that the best of the above models can be utilized to anticipate the Ethereum shutting cost progressively.

Execution Metrics Root mean squared blunder (RMSE) and Mean Absolute Error (MAE) are two of the most notable measurements used to check exactness for persistent factors. Both MAE and RMSE express normal model expectation blunder in units of the variable of interest. The two measurements can go from 0 to inf and are emotionless in regards to the heading of mistakes. They are adversely arranged scores, which suggests lower esteems are better. We utilized RMSE and MAE to gauge the exhibition of the relapse models show in the past part, Machine Learning.

Root Mean Square Error The root-mean-square deviation (RMSD) or root-mean-square blunder (RMSE) (or here and there root-mean-squared mistake) is a large part of the time used proportion of the differences between values (test and

populace esteems) anticipated by a model or an assessor and the qualities really noticed. The RMSE addresses the example standard deviation of the contrasts between anticipated qualities and noticed qualities.

These singular contrasts are called residuals when the calculations are performed over the information test that was used for assessment, and are called expectation mistakes when processed out-of-test. The RMSE serves to total the sizes of the blunders in forecasts for different occasions into a solitary proportion of prescient force. RMSE is a proportion of exactness, to look at anticipating mistakes of various models for a specific information and not between datasets, as it is scale subordinate.

Intermittent Neural Networks (RNN) Recurrent neural organizations are a kind of neural organization where the yields from past time steps are taken care of as contribution to the current time step. This makes an organization chart or circuit outline with cycles, which can make it hard to see how data travels through the organization. Repetitive neural organizations (RNN) are a broadly utilized device for the forecast of time series. RNNs are fit and make expectations throughout many time steps. Here in this subsection, the two kinds of RNNs used to anticipate the end cost of ETH, for example a ceaseless variable, are shown and tried. These two kinds are LSTM and GRU.

Long Short-Term Memory (LSTM) Long Short Term Memory (LSTM) network is a variety of Recurrent Neural Network (RNN). It was imagined to take care of the evaporating inclination issue made by ordinary RNN.

It is ensured that LSTMs are fit for recalling inputs with longer time steps. The LSTM network that has been made and utilized is displayed beneath, where its engineering is shown. As an initiation work in the secret LSTM layer, tanh was utilized to find nonlinear connections between the qualities. In the last layer, a LeakyReLU enactment work is utilized as the undertaking is nonlinear relapse to foresee a consistent non-negative variable.

BRIEF DESCRIPTION OF THE DIAGRAM

Fig.1: Bitcoin Price Quick Prediction Using AI, DL and ML, Flow Chart.

Fig.2: Bitcoin Price Quick Prediction Using AI, DL and ML, Block Diagram.

Fig.3: Bitcoin Price Quick Prediction Using AI, DL and ML.

DESCRIPTION OF THE INVENTION

In this segment, we present models for foreseeing the end cost of Ethereum (ETH). The cost is in USD. The ETH/USD information utilized for the preparation of neural organizations just as time series information were tested and isolated into preparing and approval set as per the accompanying procedure. New examples are built that pair arrangements of N tests with the resulting K examples. Thusly, a relapse model can be fit which predicts K time spans into the future given information from the past M.

All the more explicitly, the beyond 256 examples are changed into an expectation about the following 16 examples. Tests of close and weighted normal costs utilized as components to anticipate the end cost. These examples were parted for preparing the accompanying models in 80% preparing and 20 percent test set. The accompanying subsections show the neural organizations utilized in this examination, just as the different designs of those tried. It is worth focusing on that we utilized different actuation capacities, like Rectified Linear Unit (ReLU), Leaky Rectified Linear Unit (LeakyReLU), Hyperbolic Tangent (TanH).

In the neural organizations underneath, the mean squared mistake (MSE) was picked as the misfortune work and as an analyzer, adam. Amended Linear Unit (ReLU) is accepted to be one reason behind the resurrection of neural organizations in the new year's. It figures the capacity $f(x) = \max(0, x)$. Particularly, the actuation is regularly thresholder at nothing.

This invention clarifies the working of the direct relapse and Long Short-Term Memory model in anticipating the worth of a Bitcoin. Because of its raising notoriety, Bitcoin has become like a venture and chips away at the Block chain innovation which additionally gave raise to other cryptographic money. This makes it undeniably challenging to foresee its worth and consequently with the assistance of Machine Learning Algorithm and Artificial Neural Network Model this indicator is tried.

In this review, we have utilized informational collections for Bitcoin for testing and preparing the ML and AI model. With the assistance of python libraries, the information filtration process was finished. Python has given a best component for information examination and representation. After the comprehension of the information, we trim the information and utilize the provisions or qualities most appropriate for the model. Execution of the model is done and the outcome is recorded.

It was found that the direct relapse model's precision rate is exceptionally high when contrasted with other Machine Learning models from related works; it was viewed as 99.87 percent exact. The LSTM model, then again, shows a smaller than expected mistake pace of 0.08 percent. This, thusly, exhibits that the neural organization model is more advanced than the AI model.

In this work, a little GUI has been made utilizing the tkinter library that will permit the client to include the High, Low, and Open components esteems and afterward anticipate the following incentive for the coin. This invention analyzes the forecast results of an AI model and a fake neural organization model. Since straight relapse gave the most noteworthy precision contrasted with the other AI models, we utilized it to contrast it with the LSTM model.

WE CLAIMS

1. Our Invention "Bitcoin Price Quick Prediction Using AI, DL and ML "is a Digital currency are a computerized method of cash wherein all exchanges are held electronically. It is a delicate money which doesn't exist as hard notes truly. Here, we are underscoring the distinction of fiat cash which is decentralized that with practically no outsider intercession all virtual money clients can get the administrations. Notwithstanding, getting administrations of these digital currencies impacts on global relations and exchange, because of its excessive cost unpredictability. There are a few virtual monetary forms, for example, bitcoin, swell, ethereum, ethereum exemplary, light coin, and so on in our review, we particularly centered around a well-known digital money, i.e., bitcoin. From many sorts of virtual monetary forms, bitcoin has an extraordinary acknowledgment by various bodies like financial backers, scientists, brokers, and strategy creators. As far as we could possibly know, our objective is to carry out the effective profound learning-based forecast models explicitly long momentary memory (LSTM) and gated intermittent unit (GRU) to deal with the value unpredictability of bitcoin and to acquire high exactness. Our review includes looking at these double cross series profound learning strategies and demonstrated the viability in estimating the cost of bitcoin.
2. According to claim1# the invention is to a "Bitcoin Price Quick Prediction Using AI, DL and ML "is a Digital currency are a computerized method of cash wherein all exchanges are held electronically.
3. According to claim1,2,3# the invention is to a delicate money which doesn't exist as hard notes truly. Here, we are underscoring the distinction of fiat cash which is decentralized that with practically no outsider intercession all virtual money clients can get the administrations.
4. According to claim1,2,3# the invention is to a Notwithstanding, getting administrations of these digital currencies impacts on global relations and exchange, because of its excessive cost unpredictability. There are a few virtual monetary forms, for example, bitcoin, swell, ethereum, ethereum exemplary, light coin, and so on in our review, we particularly centered around a well-known digital money, i.e., bitcoin.
5. According to claim1,2,3,4# the invention is to a many sorts of virtual monetary forms, bitcoin has an extraordinary acknowledgment by various bodies like financial backers, scientists, brokers, and strategy creators. As far as we could possibly know, our objective is to carry out the effective profound learning-based forecast models explicitly long momentary memory (LSTM).
6. According to claim1,2,3,4# the invention is to a gated intermittent unit (GRU) to deal with the value unpredictability of bitcoin and to acquire high exactness. Our review includes looking at these double cross series profound learning strategies and demonstrated the viability in estimating the cost of bitcoin.

ABSTRACT

Our Invention “Bitcoin Price Quick Prediction Using AI, DL and ML “is a Digital currency are a computerized method of cash wherein all exchanges are held electronically. It is a delicate money which doesn't exist as hard notes truly. Here, we are underscoring the distinction of fiat cash which is decentralized that with practically no outsider intercession all virtual money clients can get the administrations. Notwithstanding, getting administrations of these digital currencies impacts on global relations and exchange, because of its excessive cost unpredictability. There are a few virtual monetary forms, for example, bitcoin, swell, ethereum, ethereum exemplary, light coin, and so on in our review, we particularly centered around a well-known digital money, i.e., bitcoin. From many sorts of virtual monetary forms, bitcoin has an extraordinary acknowledgment by various bodies like financial backers, scientists, brokers, and strategy creators. As far as we could possibly know, our objective is to carry out the effective profound learning-based forecast models explicitly long momentary memory (LSTM) and gated intermittent unit (GRU) to deal with the value unpredictability of bitcoin and to acquire high exactness. Our review includes looking at these double cross series profound learning strategies and demonstrated the viability in estimating the cost of bitcoin.

FORM 2
THE PATENT ACT 1970 &
 The Patents Rules, 2003
COMPLETE SPECIFICATION
 (See section 10 and rule 13)

TITLE OF THE INVENTION:

Cancer Therapeutics Using Nanoparticles Based on Warburg Effect.

Name	Nationality	Address
Ms. Remya Madan Gopal	AN INDIAN NATIONAL	MAHATMA EDUCATION SOCIETY'S Pillai HOC College of Arts, Science and Commerce, Pillai HOCL Educational Campus, Rasayani, Taluka Khalapur, Dist, Raigad, Maharashtra 410207 e mail: remyagopal@mes.ac.in Aadhar no: 776865444464 PAN no: AUAPR8471L mo no: 9958624503 dob: 03/01/1982

REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

ABSTRACT

Our Invention "Disease Therapeutics Using Nanoparticles Based On Warburg Effect" The Warburg Effect is a notable peculiarity saw in malignant growth cells characterized as an expansion in the pace of glucose take-up and special creation of lactate, even within the sight of oxygen. This makes the cells create energy by a less effective oxygen consuming glycolysis pathway rather than the ordinary cell breath through Kreb's cycle and oxidative phosphorylation course. The innovation proposes an enemy of disease treatment dependent on this impact using nanoparticles to target mitochondria in malignant growth cells. The nanoparticles might be of polymeric, lipid, phospholipid or inorganic beginning and may go in size from [2nm to 500nm] containing reasonable atoms, characterized API or substance elements adsorbed, entangled or covalently connected to the nanoparticles that will cause the mitochondria in malignant growth cells to restart dynamic oxidative phosphorylation, making them return to ordinary working state and in this manner, enacting the apoptosis pathway. These nanoparticles might be enlivened with focusing on ligands or moieties for particular take-up by disease cells through upregulated receptors like folate receptor, EGFR receptor or other such development receptors characterized in writing. This pathway is inert in disease cells as a result of the mitochondrial brokenness and enacting the pathway will make the malignant growth cells helpless against apoptotic signals. As mitochondria are key participants to incite the characteristic cell passing or apoptosis pathway and on the grounds that disease cells have mitochondrial brokenness, the malignant growth cells can multiply without going through cell demise. The current development visualizes turning these rebel cells delicate to apoptotic demise through designated mitochondrial Nano particulate therapeutics.

FIELD OF THE INVENTION

Our Invention is related to a Cancer Therapeutics Using Nanoparticles Based On Warburg Effect.

BACKGROUND OF THE INVENTION

Strong Lipid Nanoparticles Solid lipid nanoparticles (SLNs) can be characterized as colloidal scatterings made out of lipids that are strong at room and internal heat level. SLNs were created as elective transporters to liposomes and polymeric nanoparticles to conquer the disservices, like polymer corruption, cytotoxicity, huge scope producing issues, drug spillage, and precariousness.

The strong lipid center of SLNs structures a framework that can embody both hydrophobic and lipophilic medications. They likewise secure the fused medication against compound, photochemical, or oxidative corruption and forestall its spillage while also offering the chance of supported delivery, as the medication's portability in the strong lipid stage is significantly lower than that in the sleek stage.

SLN planning strategies incorporate high-pressure homogenization, hot/cold homogenization, twofold emulsion, and dissolvable relocation and emulsification-dissemination procedures. Drug stacking and conveyance into SLNs relies upon the lipophilicity and design of the atoms. They are generally read up for disease treatment.

Vague circulation and wild arrival of medications in customary medication conveyance frameworks (CDDSs) have prompted the improvement of savvy Nano transporter based medication conveyance frameworks, which are otherwise called Smart Drug Delivery Systems (SDDSs). SDDSs can convey medications to the objective locales with decreased measurement recurrence and in a spatially controlled way to moderate the secondary effects experienced in CDDSs.

Chemotherapy is generally used to treat disease, which is the subsequent driving reason for death around the world. Site-explicit medication conveyance prompted a strong fascination with the SDDSs as an option in contrast to chemotherapy.

Brilliant Nano transporters, nanoparticles used to convey drugs, are at the focal point of SDDSs. A brilliant medication conveyance framework comprises of savvy nanocarriers, focusing on components, and upgrade procedures. This survey features the new improvement of SDDSs for various brilliant nanocarriers, including liposomes, micelles, dendrimers, meso-permeable silica nanoparticles, gold nanoparticles, very paramagnetic iron-oxide nanoparticles, carbon nanotubes, and quantum dabs. The nanocarriers are portrayed as far as their constructions, order, union and level of quickness.

Despite the fact that SDDSs include various benefits over chemotherapy, there are main pressing issues about the harmfulness of brilliant nanocarriers; accordingly, a significant report on the poisonousness and biocompatibility of the nanocarriers has been accounted for. At last, the difficulties and future exploration scope in the field of SDDSs are likewise introduced.

In the beyond couple of hundreds of years, malignant growth has been one of the most genuine dangers to human wellbeing. Disease patients have a sort endurance assumption and helpless life quality. Albeit huge advancement has been made in clinical innovation for malignant growth treatments, the mortality from tumors is as yet higher than anticipated and disease treatment requires further examination. Current disease treatments mostly incorporate a medical procedure, chemotherapy, and radiotherapy.

While a medical procedure on many events can't totally eliminate all malignant growth cells in the human body, both chemotherapy and radiotherapy have serious harmful incidental effects on typical cells and helpless specificities for disease cells. For example, doxorubicin (DOX), perhaps the most well-known chemotherapeutic agent, can prompt apoptosis of quickly partitioning cells, yet it can likewise bring about apoptosis of various typical cells separating quickly.

As of late, there have been critical accomplishments in the utilization of nanotechnology, particularly in photonics, material science, supramolecular gatherings and medication conveyance. Specifically, the clinical use of nanotechnology, which was called nanomedicine, advanced the improvement of different sorts of nanoparticles (NPs), like polymeric micelles, carbon nanotubes, liposomes, Great exertion has been spent on the designing of Nano particulate transporters, what work as productive indicative or restorative apparatuses for disease.

OBJECTIVES OF THE INVENTION

- 1) The objective of the invention is to provide a "Disease Therapeutics Using Nanoparticles Based On Warburg Effect" The Warburg Effect is a notable peculiarity saw in malignant growth cells characterized as an expansion in the pace of glucose take-up and special creation of lactate, even within the sight of oxygen.
- 2) The other objective of the invention is to provide a makes the cells create energy by a less effective oxygen consuming glycolysis pathway rather than the ordinary cell breath through Kreb's cycle and oxidative phosphorylation course.
- 3) The other objective of the invention is to provide a innovation proposes an enemy of disease treatment dependent on this impact using nanoparticles to target mitochondria in malignant growth cells.
- 4) The other objective of the invention is to provide a nanoparticles might be of polymeric, lipid, phospholipid or inorganic beginning and may go in size from [2nm to 500nm] containing reasonable atoms, characterized API or substance elements adsorbed, entangled or covalently connected to the nanoparticles that will cause the mitochondria in malignant growth cells to restart dynamic oxidative phosphorylation, making them return to ordinary working state and in this manner, enacting the apoptosis pathway.
- 5) The other objective of the invention is to provide a nanoparticle might be enlivened with focusing on ligands or moieties for particular take-up by disease cells through upregulated receptors like folate receptor, EGFR receptor or other such development receptors characterized in writing.
- 6) The other objective of the invention is to provide a pathway is inert in disease cells as a result of the mitochondrial brokenness and enacting the pathway will make the malignant growth cells helpless against apoptotic signals.
- 7) The other objective of the invention is to provide a mitochondria are key participants to incite the characteristic cell passing or apoptosis pathway and on the grounds that disease cells have mitochondrial brokenness, the malignant growth cells can multiply without going through cell demise.

- 8) The other objective of the invention is to provide a current development visualizes turning these rebel cells delicate to apoptotic demise through designated mitochondrial Nano particulate therapeutics.

SUMMARY OF THE INVENTION

Malignant growth is perhaps the deadliest illness on the planet. As of late, nanotechnology, as an extraordinary innovation, has been completely applied in the treatment of disease through analysis, imaging and theranostics. Also, with the development of cutting edge biomaterials which are equipped for being applied in biomedical, research in disease nanotechnology has gained critical headway. Especially, nanomaterials with aspects under a few hundred nanometers are seriously contemplated among these high level biomaterials.

In past many years, various natural and inorganic nanomaterials have arisen as original devices for malignant growth diagnostics and therapeutics because of their one of a kind quality, similar to their solubilization impact, drug insurance, latent/dynamic cancer focusing on, controlled arrival of medications which bring about improved anticancer viability while lessening the secondary effects. In this survey, we initially give a short portrayal of the vital properties of nanomaterials, for example, nanoparticle (NP) size, surface properties and cancer focusing on.

The significant objective of this survey is to sum up the accomplishments that have been made in the improvement of the utilization of nanomaterials for disease treatments, alongside a short depiction of their overall attributes and planning of different sorts of nanoparticles.

The hindrances of regular anticancer medications, like their low bioavailability, poor focusing on viability, and genuine secondary effects, have prompted the disclosure of new restorative specialists and potential medication conveyance frameworks. Specifically, the presentation of nano-sized medication conveyance frameworks (NDDSs) has opened new skylines for successful disease treatment.

These are viewed as potential frameworks that give profound tissue entrance and explicit medication focusing on. Then again, atomic component erythroid 2-related element 2 (NRF2)- based anticancer therapy approaches have drawn in gigantic consideration and delivered empowering results. In any case, the absence of successful definition systems is one of the variables that impede the clinical use of NRF2 modulators. In this survey, we at first spotlight on the basic job of NRF2 in disease cells and NRF2-based anticancer therapy. Accordingly, we survey the readiness and portrayal of NDDSs epitomizing NRF2 modulators and talk about their potential for disease treatment.

Polymeric Nanoparticles Polymeric nanoparticles (PNPs) are characterized as colloidal particles with sizes going from 1 to 1000 nm. Biocompatible and biodegradable polymers with normal or manufactured beginning are utilized to shape the PNP structure. PNPs are elective frameworks to liposomes with very

much like shape and size properties; nonetheless, they give extra benefits, for example, better in vivo/in vitro steadiness, high freight limit, and focusing on.

Contingent upon the arrangement strategy, PNPs with ideal attributes can be acquired utilizing appropriate settling specialists (poly (vinyl liquor)- PVA, pluronics, and so forth) and dissolvable frameworks (CH₃)₂CO, dichloromethane, chloroform, and so on) Methods, for example, splash drying and supercritical liquid showering can be utilized for the huge scope creation of PNPs. In the writing, the term PNPs is utilized for Nanocapsules and nanospheres that contrast from one another by their morphological constructions. Nanocapsules are repository frameworks, which epitomize the broke up drug in a fluid center that is encircled by a polymeric film. Then again, nanospheres are polymeric grid frameworks that entangle a medication inside their organization or by all accounts.

Minuscule and stream cytometry examination affirmed apoptotic cell demise for C6 glioma cells by means of Trigo-WSCS NPs [70]. Trigo-WSCS NPs gave improved biocompatibility and neurite development of rodent adrenal pheochromocytoma (PC12) cells. Another exploration bunch showed the inhibitory impact of trigonelline-fused chitosan nanoparticles on growth cell (CT26 colon carcinoma) attack. The cancer prevention agent properties of chitosan are notable and the further developed restraint of cell intrusion was clarified by a potential synergistic impact of trigonelline and chitosan. As a characteristic flavone, chrysin is perceived as an antitumor specialist due its NRF2 restraint component interceded through the PI3K/Akt pathway. Chrysin stifle the expansion, relocation, and attack of different disease cells; notwithstanding, its bioavailability and biomedical applications are restricted because of its poor watery solvency, low porousness, and quick digestion.

The nanoparticle plan permitted the pH-responsive double arrival of the two medications and altogether diminished the reasonability of human lung epithelial malignant growth cell lines (A549). The noticed cytotoxicity impact was essentially worked on contrasted with the free medications or single medication stacked nanoparticles.

One of the benefits of nanomaterials is that their size is legitimate. The size of NPs utilized in a medication conveyance framework ought to be adequately huge to forestall their quick spillage into blood vessels however sufficiently little to get away from catch by fixed macrophages that are stopped in the reticuloendothelial framework (RES). Routinely, foundationally managed NPs ought to have breadths going from 10 to 200 nm, bigger than 10 nm in distance across to keep away from initial pass disposal through the kidneys while more modest than 200 nm to stay away from sequestration by sinusoids in the spleen and fenestra of the liver, helping biodistribution and freedom/aggregation conduct. Moreover, as the typical endothelium has a normal compelling pore size of 5 nm, particles less than that will quickly extravasate across the endothelium. The size of NPs has been displayed to impact dissemination half-life and cancer amassing

Organic nanomaterials for cancer therapies

Due to the phenomenal properties, like natural similarity and degradability, normal or engineered polymer-shaped natural based nanomaterials have been widely utilized in the field of malignant growth treatments. They can generally be partitioned into five sorts, for example polymeric micelles, polymeric NPs, liposomes, dendrimers and polymer-drug forms.

Polymeric NPs stacked with imaging specialists, in particular, gadolinium edifices and attractive NPs have been widely investigated to picture malignant growth by attractive reverberation imaging (MRI). Commonly, imaging specialists were epitomized into the center of the polymeric NPs. For example, fostered an original folate-formed PEGylated PLGA-based NP for liver malignant growth therapeutics; sorafenib and attractive NP were co-epitomized into the NP. The outcomes uncovered that the polymeric NP had great imaging property. Besides, this NP definition showed extraordinary hindrance of cancer cell development.

As of late, to acknowledge consolidated symptomatic and remedial capacities, Li et al. arranged a theranostics NP, which was blended by the coordination of a gadolinium-based MRI specialist and a functioning gemcitabine metabolite through supramolecular self-get together combination.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: Cancer Therapeutics Using Nanoparticles Based On Warburg Effect, Flow.

FIG.2: Cancer Therapeutics Using Nanoparticles Block Diagram.

FIG.3: Cancer Therapeutics Using Nanoparticles

DESCRIPTION OF THE INVENTION

Basic Role of NRF2 in Cancer Cells NRF2 is one of the central members in the support of cell homeostasis through controlling the redox balance, digestion, expansion, and protein collapsing. Over the most recent 10 years, there have been a few distributions that showed malignant growth as being firmly associated with the NRF2/KEAP1 flagging pathway. Nonetheless, while focusing on the NRF2/KEAP1 flagging pathway for the counteraction and expected therapy of malignant growth, the double jobs of NRF2 in disease advancement must be thought of.

Under ordinary physiological conditions, the defensive job of NRF2 going about as a cancer silencer through keeping up with cell redox homeostasis (taking out ROS and cancer-causing agents) and managing cell development is recognized, though, in many set up diseases, upregulation of NRF2 was distinguished, in this way helping malignant growth cells to withstand extreme oxidative pressure and lessening the impacts of chemotherapeutic specialists and radiotherapy. To be sure, NRF2 was shown to be liable for the radio-and chemo obstruction of disease cells (for the most part by invigorating medication digestion or medication efflux) notwithstanding aggravation initiated carcinogenesis.

NRF2 additionally invigorates disease cell development and expansion, advances supported angiogenesis, and stifles malignant growth cell apoptosis. NRF2 is perceived as a pleiotropic record factor that is additionally fundamentally engaged with metabolic reinventing in disease cells. Various other useful or unfavorable impacts of NRF2 acting through different flagging pathways have additionally been accounted for and broadly surveyed. All realities referenced affirm that NRF2 has a basic job in disease and, consequently, addresses an extremely encouraging future objective for anticancer therapy.

NDDSs in the Delivery of NRF2 Modulators for Cancer Therapy Numerous plan advancement procedures have been created to work on the general bioavailability of antineoplastic specialists by giving the conveyance of medications to target locales at the necessary focuses inside a specific time. Specifically, nanotechnology based medication conveyance techniques give a promising possibility to the avoidance, finding, and therapy of disease patients.

Drugs with different dissolvability profiles can be either typified or formed into NDDSs. These frameworks are all around endured in vivo because of their biocompatible and biodegradable nature. The significant test in growth explicit medication conveyance is to give drug transport through natural obstructions. By adjusting the plan and assembling process boundaries, the attributes of NDDSs, for example, the molecule size, drug stacking, and surface charge, can be custom-made for explicit applications.

Along these lines, further developed boundary entrance and medication focusing on can be acquired. The two fundamental focusing on methodologies for NDDSs are detached focusing on through the improved porousness and maintenance (EPR) impact and dynamic focusing on by means of site-explicit ligands.

WE CLAIMS

- 1) Our Invention "Disease Therapeutics Using Nanoparticles Based On Warburg Effect" The Warburg Effect is a notable peculiarity saw in malignant growth cells characterized as an expansion in the pace of glucose take-up and special creation of lactate, even within the sight of oxygen. This makes the cells create energy by a less effective oxygen consuming glycolysis pathway rather than the ordinary cell breath through Kreb's cycle and oxidative phosphorylation course. The innovation proposes an enemy of disease treatment dependent on this impact using nanoparticles to target mitochondria in malignant growth cells. The nanoparticles might be of polymeric, lipid, phospholipid or inorganic beginning and may go in size from [2nm to 500nm] containing reasonable atoms, characterized API or substance elements adsorbed, entangled or covalently connected to the nanoparticles that will cause the mitochondria in malignant growth cells to restart dynamic oxidative phosphorylation, making them return to ordinary working state and in this manner, enacting the apoptosis pathway. These nanoparticles might be enlivened with focusing on ligands or moieties for particular take-up by disease cells through upregulated receptors like folate receptor, EGFR receptor or other such development receptors characterized in writing. This pathway is inert in disease cells as a result of the mitochondrial brokenness and enacting the pathway will make the malignant growth cells helpless against apoptotic signals. As mitochondria are key participants to incite the characteristic cell passing or apoptosis pathway and on the grounds that disease cells have mitochondrial brokenness, the malignant growth cells can multiply without going through cell demise. The current development visualizes turning these rebel cells delicate to apoptotic demise through designated mitochondrial Nano particulate therapeutics.
- 2) According to claim1# the invention is to a "Disease Therapeutics Using Nanoparticles Based On Warburg Effect" The Warburg Effect is a notable peculiarity saw in malignant growth cells characterized as an expansion in the pace of glucose take-up and special creation of lactate, even within the sight of oxygen.
- 3) According to claim1,2,3# the invention is to a makes the cells create energy by a less effective oxygen consuming glycolysis pathway rather than the ordinary cell breath through Kreb's cycle and oxidative phosphorylation course.

- 4) According to claim1,2,3# the invention is to innovation proposes an enemy of disease treatment dependent on this impact using nanoparticles to target mitochondria in malignant growth cells.
- 5) According to claim1,2,3,4# the invention is to nanoparticles might be of polymeric, lipid, phospholipid or inorganic beginning and may go in size from [2nm to 500nm] containing reasonable atoms, characterized API or substance elements adsorbed, entangled or covalently connected to the nanoparticles that will cause the mitochondria in malignant growth cells to restart dynamic oxidative phosphorylation, making them return to ordinary working state and in this manner, enacting the apoptosis pathway.
- 6) According to claim1,2,4,5# the invention is to nanoparticles might be enlivened with focusing on ligands or moieties for particular take-up by disease cells through upregulated receptors like folate receptor, EGFR receptor or other such development receptors characterized in writing.
- 7) According to claim1,2,4,5# the invention is to pathway is inert in disease cells as a result of the mitochondrial brokenness and enacting the pathway will make the malignant growth cells helpless against apoptotic signals.
- 8) According to claim1,2,4# the invention is to mitochondria are key participants to incite the characteristic cell passing or apoptosis pathway and on the grounds that disease cells have mitochondrial brokenness, the malignant growth cells can multiply without going through cell demise.
- 9) According to claim1,2,4# the invention is to current development visualizes turning these rebel cells delicate to apoptotic demise through designated mitochondrial Nano particulate therapeutics.

FORM 2
THE PATENT ACT 1970 &
 The Patents Rules, 2003
COMPLETE SPECIFICATION
 (See section 10 and rule 13)

TITLE OF THE INVENTION:

Device to Detect the Fruit and Vegetable Classification and fruit (Apple) Disease.

Name	Nationality	Address
Applicant		
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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

ABSTRACT

Our development "Device to Detect the Fruit and vegetable order and natural product (Apple) Disease "is pictures are a significant wellspring of information and data in the horticultural sciences. The usage of picture getting ready procedures has striking implications for the assessment of country errands. Like Fruit and vegetable gathering is one of the critical applications that can be utilized in supermarkets to thus perceive such regular items or vegetables purchased by customers and to choose the fitting expense and Quality for the produce. Getting ready close by is the major fundamental for this kind obviously of activity which is all things considered achieved by the customers having practically no expert data. We investigated different strategies utilized in tending to products of the soil characterization and in perceiving organic product (apple) sickness issues. We overviewed picture handling approaches utilized for organic product sickness identification, division and order. We likewise thought about the presentation of cutting edge techniques under two situations, i.e., products of the soil arrangement and natural product sickness grouping. The techniques studied in this innovation can recognize among various types of foods grown from the ground infections that are exceptionally similar in shading and surface.

FIELD OF THE INVENTION

BACKGROUND OF THE INVENTION

[001] in the horticultural sciences, pictures are a significant wellspring of information and data. To recreate and report such information, photography is the lone technique that has been utilized lately. In any case, it is hard to measure or evaluate the visual information numerically.

[002] Computerized picture examination and picture taking care of development help to circumvent these issues owing to the advances in PCs and microelectronics related with traditional photography.

[003] these gadgets help in additional creating pictures from the tiny to the versatile visual reach and deal a degree for their examination. A couple of uses of picture getting ready advancement have been delivered for plant exercises.

[004] these applications incorporate the execution of camera-based hardware structures or concealing scanners for contributing the photos. PC based picture taking care of is going through fast progression with reliably changing preparing structures.

[005] The serious imaging systems available watching out, where the customer can press a couple keys and get the results, are not uncommonly adaptable and even more basically, they have an extravagant expense tag on them.

[006] Furthermore, it is hard to understand regarding how the results are being conveyed. In this advancement we outlined the composition for the game plans proposed to determine these issues and laid out request issues in the most reasonable way possible.

[007] Acknowledgment structure is a "awesome test" for the PC vision to achieve near human levels of affirmation. The portrayal of verdant food sources is significant in stores where costs for natural items purchased by a client can be described normally.

[008] Appointing codes for each kind of results of the dirt is a common response for this issue, yet this technique presents a couple of issues like maintenance of a colossal number of codes, which fail to do as such may achieve goofs in esteeming.

[009] as a manual for the assistant, a little book with pictures and codes is given in various stores, but the issue with this technique is that flipping all through the booklet is monotonous.

[010] In this development we review a couple of picture parts and picture descriptors in the composition, and present a structure to determine the issue by

changing a camera at supermarkets that can see food sources developed starting from the earliest stage on concealing and surface prompts. Formally, the structure ought to make a summary of likely kinds of species and collection for an image of a characteristic item or vegetable.

[011] the data picture contains a characteristic item or vegetable of single arrangement, in a discretionary position and in any number. Articles inside a plastic sack can add color shifts and specular reflections. Given the grouping and the trouble of anticipating which sorts of results of the dirt are sold, getting ready should be done close by someone with basically no specific data.

[012] in this manner, the structure ought to have the alternative to achieve a more huge degree of precision using a few planning models. Noticing the adequacy of verdant food varieties and perceiving their diseases is essential for functional cultivating.

[013] supposedly, no sensor is monetarily accessible for the continuous appraisal of the ailments of trees. Exploring is the most generally utilized strategy for observing pressure in trees, however it is costly and a tedious and work serious interaction.

[014] Polymerase chain response, an atomic method utilized for the recognizable proof of natural product illnesses, is a potential arrangement, yet it requires definite testing and preparing system.

[015] Early location of yield illnesses can work with their control through legitimate administration draws near, for example, vector control through fungicide applications, sickness explicit substance applications and pesticide applications, subsequently expanding efficiency and benefit.

[016] the traditional methodology for recognition and recognizable proof of natural product illnesses is through perception by specialists utilizing their unaided eye. In some agricultural nations, counsel with specialists is a tedious and exorbitant issue due to their far off areas and their restricted accessibility.

[017] Programmed identification of natural product illnesses is important to promptly perceive the manifestations of infections when they show up on the developing organic products. Natural product infections that show up during collecting can cause huge misfortunes in yield and quality.

[018] For instance, soybean rust, a contagious illness, has caused critical financial misfortunes, yet by eliminating 24% of the contamination, the ranchers might benefit with an around 11.5 million-dollar benefit. An early identification arrangement of natural product sicknesses can help with diminishing such misfortunes and can stop additionally spread of infections.

[019] the different kinds of illnesses of organic products decide the quality, amount and security of yield. Organic product illnesses lessen yield, yet in addition obliterate the assortment and result in its withdrawal from the development. Natural product sicknesses show up as spots on the foods grown from the ground, not treated quickly, can cause extreme misfortunes.

[020] Extreme utilization of pesticides to control organic product illnesses expands the degrees of harmful buildups on agrarian items, and this training has additionally been recognized as a significant supporter of groundwater pollution.

[021] Pesticides are additionally among the most costly parts in the creation cost, and their utilization likewise presents critical dangers to the soundness of biological systems and the customers. In this way, their application should be limited. In this paper, we explored the methodologies intended to identify organic product infections when they show all together that legitimate administration treatment can be applied.

OBJECTIVES OF THE INVENTION

1. The objective of the invention is to provide a development "Device to Detect the Fruit and vegetable order and natural product (Apple) Disease "is pictures are a significant wellspring of information and data in the horticultural sciences.
2. The other objective of the invention is to provide a utilization of picture preparing strategies has remarkable ramifications for the examination of rural tasks.
3. The other objective of the invention is to provide a Like Fruit and vegetable grouping is one of the significant applications that can be used in grocery stores to consequently recognize the sorts of natural products or vegetables bought by clients and to decide the fitting cost and Quality for the produce.
4. The other objective of the invention is to provide a Preparing nearby is the fundamental essential for this sort of course of action which is by and large brought about by the clients having almost no master information. We investigated different strategies utilized in tending to products of the soil characterization and in perceiving organic product (apple) sickness issues.
5. The other objective of the invention is to provide a We overviewed picture handling approaches utilized for organic product sickness identification, division and order.
6. The other objective of the invention is to provide a likewise think about the presentation of cutting edge techniques under two situations, i.e., products of the soil arrangement and natural product sickness grouping.

SUMMARY OF THE INVENTION

[022] various examinations have been directed on picture arrangement. Veggie-Vision was an underlying endeavor to foster a produce acknowledgment framework for use in grocery stores. The framework could dissect shading, surface and thickness, and along these lines had the option to get more data.

[023] Thickness was determined by separating weight with the space of the organic product. The detailed exactness was around 98% when tone and surface provisions were consolidated however the best four reactions were utilized to accomplish such outcome.

[024] the fostered a methodology that could consolidate many provisions and classifiers. The innovator drew nearer the multi-class characterization issue as a bunch of twofold arrangement issue so that one can gather into one spot different elements and classifier approaches exclusively custom fitted to parts of the issue.

[025] They accomplished an order exactness of up to 99.98% for apple-natural products, yet they intertwined three elements, in particular, line inside characterization (BIC), shading soundness vector (CCV), and unser includes, and recognized top two reactions to accomplish them.

[026] their strategy acquired helpless outcomes for certain kinds of foods grown from the ground, like Fuji Apple and also the joined shading and surface components to order the produce. They utilized least distance classifier and accomplished 89% exactness over their dataset with 10 distinct kinds of produce.

[027] the introduced a structure for classifier combination for the programmed acknowledgment of produce in general stores. They consolidated minimal expense classifiers prepared for explicit classes important to upgrade the acknowledgment rate. The perceived 10 distinct vegetables utilizing shading histogram and factual surface components and also they got an order exactness of up to 96.55% utilizing neural organization as a classifier.

[028] to outline the part vector, they initially managed and resized the image and subsequently removed the mean and extent of tone and submersion channel of HSV picture. The gained 95% course of action accuracy over a dataset with eight sorts of different vegetables using surface measures in RGB concealing space. They used watershed division to remove the district of interest as a pre-getting ready and choice tree classifier for preparing and characterization purposes.

[029] the imagined a structure for perceiving and grouping pictures of 15 distinct sorts produce and also the methodology includes sectioning a picture to separate the area of premium, and afterward computing the provisions from that fragmented locale, which is additionally utilized in preparing and arrangement by a multi-class support vector machine.

[030] additionally, they proposed a further developed total and contrast histogram (ISADH) surface element for this sort of issue. The ISADH beat the other picture tone and surface elements.

[031] the fostered a division calculation to direct a robot arm in picking ready tomatoes utilizing picture handling method. They arranged a machine vision framework to get pictures from tomatoes. The calculation works in two stages:

(1) The foundation is deducted from the RGB shading space and afterward the ready tomato is extricated utilizing a mix of RGB, HSI, and YIQ shading spaces.

(2) The ready tomato is confined utilizing morphological provisions of the picture. They accomplished an exactness of up to 96.36% for 110 tomato pictures.

[032] Organic product recognition enormously influences the robot's reaping effectiveness since it is an unstructured climate with changing lighting conditions. The upgraded the part involved by natural product in pictures utilizing a red chromaticity coefficient and took on a circle identification strategy for grouping singular organic products.

[033] to further develop organic product deceivability; they gained various perspectives from various review plots for a part of a tree shelter. Organic product deceivability improved from half to about 90% by securing numerous perspectives.

[034] the calculation can dole out various loads for various provisions like tone, power, edge and the direction of the info picture. The rough areas of the organic product inside a picture are addressed by the loads of the various components. The calculation can identify up to 98% of various natural product pictures taken from various situations on a tree.

BRIEF DESCRIPTION OF THE DIAGRAM

Fig.1: Device to Detect the Fruit and Vegetable Classification and fruit (Apple) Disease Flow Chart.

FIG.2: Device to Detect the Fruit and Vegetable Classification and fruit (Apple) Disease Block Diagram.

FIG.3: Device to Detect the Fruit and Vegetable Classification and fruit (Apple) Disease.

DESCRIPTION OF THE INVENTION

[035] Programmed location of natural product sicknesses is important to identify quickly the manifestations when they show up on the developing natural products. Natural product illnesses can create subsequent to gathering, in this way causing significant misfortunes in yield and quality.

[036] To figure out what infectious prevention measures to take to stay away from comparative misfortunes during the following collecting time frame, it is urgent to

perceive the indications of natural product sicknesses. A few illnesses can likewise influence different pieces of the tree, tainting twigs, leaves and branches.

[037] some normal illnesses of apple natural products are apple scab, apple decay and apple smudge. Apple scabs are dim or brown corky spots. Apple decay diseases produce marginally depressed, round brown or dark spots that might be covered by a red corona. Apple smear is a parasitic infection and shows up on the outside of the natural product as dim, unpredictable or lobed edges.

[038] Since shoppers request top notch food items, a quick, exact and target technique for deciding food quality is required. A promising option is the utilization of PC vision as a savvy, non-ruinous and robotized strategy.

[039] this investigation approach dependent on picture examination and handling has discovered a wide range of uses in the food and farming industry. Brosnan and Sun investigated the advancement that had been made in the improvement of PC vision, and underscored the significant parts of the picture handling strategy combined with late advancements all through the farming and food industry.

[040] Bennedsen and Peterson fostered a machine vision framework for arranging apples as per surface deformities, including wounds. The framework could distinguish surface deformities utilizing a mix of a routine dependent on fake neural organizations and head parts, and three unique limit division schedules.

[041] At the point when assessed utilizing eight apple assortments, the schedules had the option to identify 77%–98% of the individual imperfections and had the option to quantify 78%–95% of the complete inadequate region.

[042] the turning apples before a camera to catch numerous pictures and eliminated the dim regions on the apple surface effectively. The distinguished four sorts of citrus illnesses regarding uninfected natural products utilizing shading co-event strategies and summed up squared distance in HSV shading space, and accomplished over 98% precision.

[043] the presented a methodology for characterizing grapefruit strip infections. Their dataset comprised of the six known illnesses of grapefruit strip and the uninfected one. The ROI of the organic product is created by editing over which force surface elements are produced and ordered utilizing discriminative examination. They acquired 98% exactness.

[044] the investigated the variety in temperature at various times in citrus covering as an expected methodology for recognizing oranges. Utilizing a warm infrared camera, they observed the tree overhang in 24-h cycles and estimated surface temperature, surrounding temperature and relative mugginess.

[045] the temperature profile of both the overhang and natural product exhibited enormous temperature inclinations from evening (16:00) until late. Utilizing

picture preparing methods, they divided productively the warm pictures of the natural products during the period with the biggest temperature distinction.

[046] they melded a warm picture with a noticeable picture of an orange shelter to further develop natural product location. A warm infrared camera caught the warm picture while an advanced shading camera gained the apparent picture.

[047] they applied two picture combination draws near, in particular, fluffy rationale and the Laplacian pyramid change (LPT). The fluffy rationale approach performed better compared to the LPT, and both combination approaches further developed recognition as contrasted and utilizing warm pictures alone.

[048] They fostered a hyperspectral imaging framework for gaining reflectance pictures of citrus tests in the otherworldly district going from 450 to 930 nm. They performed otherworldly data disparity (SID) order of hyperspectral pictures of grapefruits to perceive blister from typical leafy foods citrus surface conditions by evaluating the ghastly similitudes utilizing a foreordained infection reference range.

[049] they point by point an overall portrayal precision of 98.2% using a smoothed out SID limit worth of 0.0087. They proposed the use of three cameras that can distinguish the reflectance in the clear locale and restricted gatherings in the nearby infrared region for simultaneous concealing appraisal and area of natural item deformation.

[050] the evident region was used for concealing exploring, however a slight band centered at 780 nm was for perceiving concavity with coordinated light while an ensuing band centered at 750 nm was for recognizing faint spots under complex lighting up.

[051] In another assessment, Crowe and united two close infrared photos of a natural item with a continuous pipeline picture taking care of system. The information on coordinated light worked with in unmistakable flaws from concavities. They evaluated the total broadened space of flaws on every results of the dirt orchestrated the disfigurements subject to the defect pixel total.

Image Segmentation and Defect Segmentation

[052] Picture division is an advantageous and powerful strategy for recognizing frontal area objects in pictures with fixed foundation. Foundation deduction is a normally utilized class of strategies for portioning objects of revenue in a scene.

[053] this undertaking has been generally concentrated in the writing. Foundation deduction procedures can be viewed as a two-object picture division technique, which frequently need to adapt to varieties in enlightenment and sensor catching relics like haze.

[054] Specular reflections, foundation mess, concealing and shadows in the pictures are the main considerations that should be tended to. In this manner, it could be important to perform picture division by zeroing in just on the item's portrayal to decrease scene intricacy.

[055] the utilized a foundation deduction strategy dependent on K-implies bunching method. Among a few picture division procedures, just the K-implies based picture division strategy gives a compromise between productive division and per unit cost.

Worldwide Color Histogram (GCH)

[056] The GCH is the most straightforward methodology for encoding the data present in a picture. A GCH is a bunch of requested qualities, for each particular tone, addressing the likelihood of a pixel being of that tone. Uniform standardization and quantization are utilized to try not to scale predisposition and to lessen the quantity of particular tones.

Shading Coherence Vector (CCV) Pass)

[057] introduced a methodology for looking at pictures dependent on CCVs. Shading intelligibility is characterized as how much picture pixels of that tone are individuals from an enormous area with homogeneous shading. These locales are alluded to as sound areas.

[058] Intelligent pixels are the pieces of the coterminous locale, while confused pixels are not. To figure for CCVs, the strategy obscures and discretizes the picture's shading space to take out little varieties between adjoining pixels.

[059] thereafter, it tracks down the associated parts in the picture to characterize the pixels of a given shading pail whether it is either rational or confused. Subsequent to ordering the picture pixels, CCV processes two shading histograms: one for cognizant-pixels and another for garbled pixels. The two histograms are put away as a solitary histogram.

Border/Interior Classification (BIC)

[060] to figure for BIC, the technique orders picture pixels as line or inside. A pixel is delegated inside if its four neighbors (top, base, left, and right) have similar quantized shading. Else, it is named line. After the picture pixels are ordered, two shading histograms are registered: one for line pixels and another for inside pixels.

Nearby Binary Pattern (LBP)

Given a pixel in the information picture, LBP is figured by contrasting it and its neighbors as follows:

$$(1) \text{LBPN}, R = \sum_{n=0}^{n-1} S(v_n - v_c)^{2n},$$

$$S(x) = \begin{cases} 1, & x \geq 0 \\ 0, & x < 0 \end{cases} \quad (1)$$

$$\text{LBPN}, R = \sum_{n=0}^{n-1} S(v_n - v_c)^{2n}$$

$$S(x) = \begin{cases} 1, & x \geq 0 \\ 0, & x < 0 \end{cases} \quad (1)$$

[061] where v_c is the worth of the focal pixel, v_n is the worth of its neighbors, R is the span of the area and N is the complete number of neighbors. Assume the facilitate of v_c is $(0, 0)$, then, at that point the directions of v_n are $R \cos(2\pi n/N)$, $R \sin(2\pi n/N)$. The upsides of neighbors that are absent in the picture frameworks might be assessed by insertion. Let the size of picture is I^* . After the LBP code of every pixel is registered, a histogram is made to address the surface picture:

$$(2) H(k) = \sum_{i=1}^I \sum_{j=1}^I f(\text{LBPN}, R(i, j), k), k \in [0, K], f(x, y) = \begin{cases} 1, & x = y \\ 0, & \text{otherwise} \end{cases} \quad (2)$$

$$H(k) = \sum_{i=1}^I \sum_{j=1}^I f(\text{LBPN}, R(i, j), k), k \in [0, K], f(x, y) = \begin{cases} 1, & x = y \\ 0, & \text{otherwise} \end{cases} \quad (2)$$

Where K is the maximal LBP code esteem

[062] In this test, the worth of " N " and " R " are set to "8" and "1", separately, to figure for the LBP highlight.

Finished Local Binary Pattern (CLBP)

[063] LBP ponders only signs of adjacent differentiations (i.e., qualification of each pixel with its neighbors), however CLBP contemplates the two signs (S) and significance (M) of neighbourhood differentiates similarly as extraordinary center faint level (C) regard.

[064] The CLBP feature is the blend of three parts, to be explicit, CLBP_S, CLBP_M, and CLBP_C. CLBP_S is comparable to the primary LBP and used to code the sign information of neighboring differentiations. CLBP_M is used to code the size information of adjacent differences:

$$(3) \text{CLBPN}, R = \sum_{n=0}^{n-1} t(m_n, c)^{2n}$$

$$T(x, c) = \begin{cases} 1, & x \geq c \\ 0, & x < c \end{cases} \quad (3)$$

$$\text{CLBPN}, R = \sum_{n=0}^{n-1} t(m_n, c)^{2n} \quad t(x, c) = \begin{cases} 1, & x \geq c \\ 0, & x < c \end{cases} \quad (3)$$

Where c is a cut-off and set to the mean worth of the data picture in this preliminary. CLBP_C is used to code the information of one of a kind center faint level worth:

$$(4) \text{CLBPN, } R = t(gc, cl), t(x, c) = \{1, x \geq c, x < c\} \quad (4)$$

$$\text{CLBPN, } R = t(gc, cl), \quad t(x, c) = \{1, x \geq c, x < c\} \quad (4)$$

Where limit c is set to the ordinary faint level of the data picture. In this preliminary, the value of "N" and "R" are set to "8" and "1", separately, to measure for the CLBP feature

Unser's Feature (UNSER)

[065] extricate the Unser highlight, the technique first discovers the total and contrast of power esteems over a relocation of $(d1, d2)$ of a picture, and afterward it computes two histograms (total and distinction histogram) and stores the two histograms as a solitary histogram.

Further developed Sum and Difference Histogram (ISADH)

[066] Dubey and Jalal encouraged a useful ISADH surface component to encode the abutting information of a pixel in the image dependent on aggregate and difference histogram. The aggregate and not really set in stone with bordering pixels the x way and a while later these yields are re-established in the y -course by discovering both the total and differentiation in the y -heading. By considering x and y orientation autonomously, the estimation can encode the association of any pixel with its connecting pixels in both the x and y headings beneficially.

WE CLAIMS

1. Our development "Device to Detect the Fruit and vegetable order and natural product (Apple) Disease "is pictures are a critical wellspring of data and information in the green sciences. The usage of picture getting ready methodologies has exceptional consequences for the assessment of provincial undertakings. Like Fruit and vegetable gathering is one of the critical applications that can be utilized in supermarkets to thus perceive such normal items or vegetables purchased by customers and to choose the fitting expense and Quality for the produce. Preparing nearby is the fundamental essential for this sort of course of action which is by and large brought about by the clients having almost no master information. We investigated different strategies utilized in tending to products of the soil characterization and in perceiving organic product (apple) sickness issues. We overviewed picture handling approaches utilized for organic product sickness identification, division and order. We likewise thought about the presentation of cutting edge techniques under two situations, i.e., products of the soil arrangement and natural product sickness grouping. The techniques studied in this innovation can recognize among various types of foods grown from the ground infections that are exceptionally similar in shading and surface.
2. According to claim1# the invention is to a development "Device to Detect the Fruit and vegetable order and natural product (Apple) Disease "is pictures are a significant wellspring of information and data in the horticultural sciences.
3. According to claim1, 2, 3 # the invention is to a Preparing nearby is the fundamental essential for this sort of course of action which is by and large brought about by the clients having almost no master information. We investigated different strategies utilized in tending to products of the soil characterization and in perceiving organic product (apple) sickness issues.
4. According to claim1, 2, 3, 4# the invention is to a We overviewed picture handling approaches utilized for organic product sickness identification, division and order.
7. According to claim1, 2, 3, 4# the invention is to likewise think about the presentation of cutting edge techniques under two situations, i.e., products of the soil arrangement and natural product sickness grouping.
8. The techniques studied in this innovation can recognize among various types of foods grown from the ground infections that are exceptionally similar in shading and surface.

FORM 2
THE PATENT ACT 1970&
The Patents Rules, 2003
COMPLETE SPECIFICATION
(See section 10 and rule 13)

TITLE OF THE INVENTION:

English Speaking Error Detector AI- Based Mobile Chip.

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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification of the Invention. Particularly describes the invention and the manner in which it is to be performed.

Complete Specification

ABSTRACT

Our Invention "English Speaking Error Detector AI-Based Mobile Chip" is an innovation which will help one actually as well as exceptionally as a fundamental expert. The significance of English language is known to all. Along these lines, an ever increasing number of individuals attempt to master conveying in English language. It is simple for those people to further develop their talking abilities who have concentrated on English as a first language in quite a while. Be that as it may, for understudies of the vernacular medium it is an extremely challenging assignment. Such people battle to convey adequately in English despite joining English-talking classes. These people become exceptionally conscious of utilizing English for correspondence in dread of committing errors, dread that individuals would ridicule them, dread of ruining their impression, etc. They timid away which brings about no improvement in communicating in the language. The thumb rule in figuring out how to communicate in another dialect is to commit errors, yet talk. Individuals are anxious in light of the fact that mix-ups cause us to feel helpless. There are a lot of spelling checker and Grammar checker applications accessible both free and paid that help people in working on their composing style and clearness. Yet, there is no device that assists people with changing over to text one's every day discussion consequently, identify and feature blunders and assist people with understanding one's own slip-ups. A chip embedded in the ear cases or versatile could help record and convert to message at whatever point the singular discussions via telephone to another person. On the off chance that a singular willing to become familiar with the English language just chooses to invest in amounts of energy to talk in English while speaking via telephone, this chip would be exceptionally be useful. When there is no dread of addressing somebody up close and personal straightforwardly, it is simpler to utilize the language. Also, consistently, the individual could actually look at the mistakes and become more certain with the application which will identify blunders and propose adjustments.

FIELD OF THE INVENTION

[500] Our invention is related to a English Speaking Error Detector AI- Based Mobile Chip.

BACKGROUND OF THE INVENTION

[501] Such frameworks are more exact in reviewing, and, in particular, they save HR and further develop proficiency. Nonetheless, there are as yet many subjects and question types that are not yet computerized, and a few subjects, like oral English, can just have a piece of their inquiries stamped consequently. There are numerous oral reviewing frameworks for peruse and discussing, yet there are not many evaluating frameworks for open-finished oral inquiries, for example, tests, redundancies, and individual reactions.

[502] Ordinate and Speechwriter scoring frameworks are perceived as ordinary instances of mechanized scoring; nonetheless, they don't address the issue for open-finished talking questions. Lately, with the advancement of discourse acknowledgment innovation and the development of exposition checking frameworks, it is normal that actually talking the programmed stamping of open-finished talking questions can be survived and arrives at a commonsense level.

[503] There are some genuine situations where it is important to assess a speaker's oral articulation capacity, like Mandarin tests, oral preparing, language showing assessments, and radio moderator tests. Presently, these situations are as yet assessed by manual scoring, for example, averaging, casting a ballot, or one-vote casting a ballot, which are excessively emotional, frequently need decency, and don't give target criticism to the speaker.

[504] The general scoring is wasteful; for language students, there are many secret issues with an oral articulation that are regularly not recognized on schedule, hence influencing the proficiency of language learning.

[505] In this creation, we concentrate on sound handling, discourse acknowledgment, programmed exposition checking, and profound learning strategies to plan and carry out a Multifeature keen programmed stamping model dependent on the information produced from the language preparing procedure for Beijing University of Posts and Telecommunications. The model is intended to take care of the issue of programmed checking of open-finished oral English inquiries and to lessen educators' stamping pressure.

[506] In this creation, a progression of strategies will be utilized to work on the exactness of the model at different phases of scoring. Prior to extricating highlights

from discourse documents, it is important to lessen the clamor and sliced quiet pieces of discourse to work on the exactness of discourse acknowledgment.

[507] In this development, an evildoer is a transgressor of existing clamor decrease strategies, joining customary commotion decrease calculations with profound learning. It applies to discourse commotion decrease for programmed reviewing of communicating in language. Additionally, this creation will utilize an open, unreservedly accessible discourse acknowledgment motor for discourse record.

[508] The acknowledgment pace of current discourse acknowledgment innovation doesn't reach 100%. Besides, language structure and jargon blunders in the perceived text because of articulation issues or familiarity issues ought to be prohibited when evaluating the punctuation and jargon of understudies' oral replies. Subsequently, to score the syntax and jargon of the discourse perceived text all the more precisely, it is important to clean the perceived text somewhat to boost the real articulation of the understudies.

[509] The strategies utilized in this innovation are spelling remedy, evacuation of sound to word imitation, and expulsion of back to back redundancies. In this development, calculations that carry out these capacities are explored to further develop scoring exactness.

OBJECTIVES OF THE INVENTION

- 1) The objective of the invention is to provide a "English Speaking Error Detector AI-Based Mobile Chip" is which will help one actually as well as exceptionally as a fundamental expert. The other objective of the invention is to provide further help in developing their talking abilities who have concentrated on English as a first language in quite a while. Be that as it may, for understudies of the vernacular medium it is an extremely challenging assignment.
- 2) The other objective of the invention is to provide a people battle to convey adequately in English despite joining English-talking classes and also these people become exceptionally aware of utilizing English for correspondence in dread of committing errors, dread that individuals would ridicule them, dread of ruining their impression, etc.
- 3) The other objective of the invention is to reduce the anxiety which lies in moving away timidly, which brings about no improvement in communicating in the language. The thumb rule in figuring out how to communicate in another dialect is to commit errors, yet talk. Individuals are anxious in light of the fact that mix-ups cause us to feel helpless.

- 4) The other objective of the invention is to provide a lot of spelling checker and Grammar checker applications accessible both free and paid that help people in working on their composing style and clearness. Yet, there is no device that assists people with changing over to text one's every day discussion consequently, identify and feature blunders and assist people with understanding one's own slip-ups.
- 5) The other objective of the invention is to provide a chip embedded in the ear cases or versatile could help record and convert to message at whatever point the singular discussions via telephone to another person. On the off chance that a singular willing to become familiar with the English language just chooses to invest in amounts of energy to talk in English while speaking via telephone, this chip would be exceptionally useful.
- 6) The other objective of the invention is to provide a dread of addressing somebody up close and personal straightforwardly, it is simpler to utilize the language. Also, consistently, the individual could actually look at the mistakes and become more certain with the application which will identify blunders and propose adjustments.

SUMMARY OF THE INVENTION

AI-Based Multifeature Fusion Algorithm

[510] The creation of human discourse is a complicated interaction that the body can execute. It initially gets signals from the cerebrum, then, at that point, removes gas from the lungs to vibrate the vocal lines, and afterward permits the laryngeal muscles to put themselves out there. The attributes of every individual's vocal plot bring about an alternate discourse sign, and this data is utilized to recognize speakers. We portray these distinctions by the acoustic qualities of discourse.

[511] Consequently, select the acoustic elements suitably in a speaker acknowledgment framework. On the off chance that the chose acoustic provisions don't sufficiently describe the speaker, even a profound learning calculation can't accomplish a decent exhibition. It has been shown that when the test discourse is adequately long, the measure of data and segregation of a solitary acoustic element is adequate to finish the speaker acknowledgment task.

[512] The MFCC highlight boundaries have been applied to over 90% of current speaker acknowledgment frameworks. Nonetheless, in short discourse speaker acknowledgment, when just the MFCC include boundaries are utilized for demonstrating, the speaker's character data can't be completely communicated, which makes it hard to acquire great acknowledgment results. However, expanded examinations have shown that the cerebrum can't productively process data from various sources simultaneously.

[513] As the HR manual clarifies, this technique includes doling out a specific season of day to zero in on a particular errand. You can even put your timetable on your schedule to tell different workers that you are occupied. Before you work, this is the way to take out all interruptions, so you can focus on the work before you. You can likewise plan time squares to coordinate with the normal changes in your energy levels for the duration of the day.

[514] Taking into account that various provisions can communicate the speaker's character data according to alternate points of view, Multifeature combination can address greater character data about the speaker, which is doable in testing short discourse conditions. Notwithstanding, the most straightforward strategy for Multifeature combination is to straightforwardly interface different acoustic components extricated from each casing of the discourse signal into an enormous vector of high-dimensional elements, which are not attractive practically speaking.

[515] Since various provisions are not symmetrical to one another, the immediate association will influence one another, and the immediate association of various elements is a high-dimensional spatial vector; expanding the dimensionality implies expanding the intricacy of the framework. Additionally, there is a sure measure of reiteration between highlight parts, which produces repetitive data. Subsequently, the high-dimensional space vector can be planned to the low-dimensional space by a dimensionality decrease calculation, and the parts that are more recognizable between speakers.

Advanced Pronunciation System Design

[516] Fourier investigation of a sound sign can be utilized to perceive how the brief time frame recurrence of the sound sign changes over the long run. Examination on the recurrence range of sound signs started some time before the advancement of computerized signal handling (DSP) innovation. A few researchers have utilized a spectrometer to record and dissect the brief time frame recurrence range of sound signs. A spectrometer is a gadget that inputs the electrical sign of a voice signal into a bunch of comparing channels and, after the yield of each channel, records it on creation in the request for the recurrence of the sound sign.

[517] The force of the sound sign recurrence can be dictated by noticing the grayscale of the track on the recording creation. On the off chance that the grayscale on the recording development is profound, the sign recurrence is solid, and in case it is shallow, the sign recurrence is powerless. We pivot the recording creation at a consistent speed, which is comparable to recording the recurrence worth of the sound sign at an alternate time on the recording development.

[518] While ascertaining the angle, the weight boundaries recurse layer by layer in the opposite proliferation bearing, and the inclination step by step decreases. By

working in the above manner occasionally, we can get a diagram of the sound sign recorded by the discourse spectrometer, which is the discourse range of the sound sign.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: English Speaking Error Detector, Flow Chart.

FIG.2: English Speaking Error Detector, Block Diagram.

FIG.3: English Speaking Error Detector AI-Based Mobile Chip.

FIG.4: English Speaking Error Detector Chip Inside in Mobile.

DESCRIPTION OF THE INVENTION

[519] To begin with, we perform commotion decrease on the sound document and afterward input the diminished sound record into the elocution scoring module and the discourse acknowledgment module to yield the articulation score and the text after discourse acknowledgment, separately. The text is then cleaned and taken care of into the familiarity scoring module, sentence structure jargon scoring module, and semantic scoring module to acquire the familiarity score, language score, jargon score, and the semantic score, separately.

[520] Then, these five qualities were standardized and used to prepare our scoring model. When the scoring model is prepared, we can utilize the model with the component extraction module to score the understudies' communicated in language. The plan of these discourse commotion decrease, discourse acknowledgment, message cleaning, and component extraction modules will be introduced independently.

[521] The speaker acknowledgment framework can be generally separated into two sections: include extraction and example acknowledgment: how to blend various sorts of data, how to extricate it, present significant level discourse signal examination, and exploration on improving the strength of voiceprint acknowledgment and decreasing the measure of computation.

[522] Since the text-related component scoring in this innovation depends on the precision of the text, the exactness of discourse acknowledgment becomes one of the main pointers before text scoring.

[523] Right now, because of the advancement of computerized reasoning and discourse acknowledgment innovation, the precision of discourse acknowledgment has been incredibly improved, and there are many open and free discourse acknowledgment stages accessible available for our utilization.

[524] The acknowledgment impact of utilizing these discourse acknowledgment stages is regularly better compared to utilizing open-source instruments to prepare

our discourse acknowledgment models, as the size of the corpus accessible for preparing discourse acknowledgment models in the research facility is a lot more modest than that of the business discourse acknowledgment corpus.

[526] The precision of the discourse acknowledgment motor is straightforwardly relative to the size of the corpus utilized for preparing. Consequently, this innovation researches the significant free discourse acknowledgment motors available, looks at their usability, acknowledgment speed, and acknowledgment precision, and chooses the most reasonable one for this review, which is utilized as the reason for test scoring.

[227] Perusing scores are identified with language structure, spelling, jargon, and text composing. Dissimilar to most straightforward single-task picking up, performing various tasks can be utilized to work on model execution in an assortment of circumstances. The particular use of perform various tasks learning, all things considered, situations is generally accomplished through the sharing of stowed away layers in the organization structure, which can be of two kinds as indicated by the distinctions in the sharing of stowed away layers in the organization structure:

- (1) hard sharing of boundaries, which implies that all organization structures are divided between all errands, and each assignment just holds its yield layer. Generally, it maintains a strategic distance from overfitting and further develops the speculation capacity of the model;
- (2) (delicate) sharing of boundaries implies that each assignment has its different model, and the level of sharing isn't really that high of hard sharing, and the models just cooperate with one another through regularization terms.

[528] Discourse information utilized in programmed discourse evaluation demonstrating are regularly recorded, in actuality, situations utilizing recording gadgets. The information assortment measure isn't normalized enough, and there are numerous possibilities.

[529] The obtained discourse information for the most part contains a great deal of commotion, for example, the sound of the recording gadget's electric flow, humming foundation clamor, generally quiet portions in the sound where nobody talks, and the encompassing clamor obstruction. These clamors are not valuable for the programmed discourse assessment model and may even significantly lessen the exhibition of the model.

[530] Hence, in this development, we need commotion diminished discourse information to further develop the discourse quality and give a dependable assurance to the presentation of ensuing models. This is a basic advance in information preprocessing. While examining explicit sound information, it is generally expected discovered that there is a slight clamor toward the start and end of the sound, just as numerous unessential low-volume parts in sentences, which involve considerably longer span than the dynamic sound.

[531] There might be repetitive data between the element parts of an element vector, which influences both the computational expense of the PC and the acknowledgment execution of the speaker acknowledgment framework. Head Component Analysis (PCA) utilizes the deterioration of element bases into symmetrical change frameworks to change over the first element vector into a low-dimensional no associated and symmetrical straight element vector.

[532] To start with, we section the discourse by the speaker's respite and sound force. We use by name a shower handling library to recognize the sound force of the objective sound at a specific second, to portion the shower all the more precisely. We over and again changed the span of quiet and the sound force that was decided to be quiet lastly set the boundaries for passing judgment on the cut point at a sound power of under -60 dB and a length of more than 100 ms and added a cut point as long as the voice met this condition eventually on schedule and in the wake of slicing to guarantee the consistency of the discourse part.

WE CLAIMS

- 1) Our Invention "English Speaking Error Detector AI-Based Mobile Chip" is an innovation that will help one actually as well as exceptionally as a fundamental expert. The significance of English language is known to all. Along these lines, an ever increasing number of individuals attempt to master conveying in English language. It is simple for those people to further develop their talking abilities who have concentrated on English as a first language in Quite a while. Be that as it may, for understudies of the vernacular medium it is an extremely challenging assignment. Such people battle to convey adequately in English despite joining English-talking classes. These people become exceptionally aware of utilizing English for correspondence in dread of committing errors, dread that individuals would ridicule them, dread of ruining their impression, etc. They timid away which brings about no improvement in communicating in the language. The thumb rule in figuring out how to communicate in another dialect is to commit errors however talk. Individuals are anxious in light of the fact that mix-ups cause us to feel helpless. There are a lot of spelling checker and Grammar checker applications accessible both free and paid that help people in working on their composing style and clearness. Yet, there is no device that assists people with changing over to text one's every day discussion consequently, identify and feature blunders and assist people with understanding one's own slip-ups. A chip embedded in the ear cases or versatile could help record and convert to message at whatever point the singular discussions via telephone to another person. On the off chance that a singular willing to become familiar with the English language just chooses to invest in amounts of energy to talk in English while speaking via telephone, this chip would be exceptionally useful. When there is no dread of addressing somebody up close and personal straightforwardly, it is simpler to utilize the language. Also, consistently, the individual could actually look at the mistakes and become more certain with the application which will identify blunders and propose adjustments.
- 2) According to claim1# the invention is to a "English Speaking Error Detector AI-Based Mobile Chip is an innovation which will help one actually as well as exceptionally as a fundamental expert. The significance of English language is known to all.
- 3) According to claim1,2,3# the invention is to a lines, an ever increasing number of individuals attempt to master conveying in English language. It is simple for those people to further develop their talking abilities who have concentrated on English as a first language in Quite a while. Be that as it may,

for understudies of the vernacular medium it is an extremely challenging assignment.

- 4) According to claim 1,2,3# the invention is to provide help to people battle to convey adequately in English despite joining English-speaking classes and also these people become exceptionally aware of utilizing English for correspondence in dread of committing errors, dread that individuals would ridicule them, dread of ruining their impression, etc.
- 5) According to claim 1,2,3# the invention is to a timid away which brings about no improvement in communicating in the language. The thumb rule in figuring out how to communicate in another dialect is to commit errors, yet talk. Individuals are anxious in light of the fact that mix-ups cause us to feel helpless.
- 6) According to claim 1,2,3,4# the invention is to a lot of spelling checker and Grammar checker applications accessible both free and paid that help people in working on their composing style and clearness. Yet, there is no device that assists people with changing over to text one's every day discussion consequently, identify and feature blunders and assist people with understanding one's own slip-ups.
- 7) According to claim 1,2,3,5# the invention is to a chip embedded in the ear cases or versatile could help record and convert to message at whatever point the singular discussions via telephone to another person. On the off chance that a singular willing to become familiar with the English language just chooses to invest in amounts of energy to talk in English while speaking via telephone, this chip would be exceptionally useful.
- 8) According to claim 1,2,3,4# the invention is to a dread of addressing somebody up close and personal straightforwardly, it is simpler to utilize the language. Also, consistently, the individual could actually look at the mistakes and become more certain with the application which will identify blunders and propose adjustments.

FORM 2
THE PATENT ACT 1970 &
The Patents Rules, 2003
COMPLETE SPECIFICATION
(See section 10 and rule 13)

TITLE OF THE INVENTION:

FLSA-System: Fifth-level Authentication System (Mobile, Laptop, PC, Locker, Etc.)

Name	Nationality	Address
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Complete Specification

FIELD OF THE INVENTION

[001] Our Invention is related to a **FLSA-System**: Fifth-level Security Authentication System.

BACKGROUND OF THE INVENTION

[002] The Verification is a significant segment of most PC frameworks, particularly those utilized in administrations over the web. In the present data and WWW age, each day a large number of clients' entrance different data administrations and applications over the web which requires secure verification of legitimate clients.

[003] there is numerous methods of validating one's authenticity. The conventional way is to utilize a solitary factor verification which requires the client to enter his ID and secret phrase to get confirmed. However, this methodology endures with numerous shortcomings, for example,

1) Users will in general pick straightforward and simple to recall passwords rather than solid alphanumeric passwords which debilitates their record security.

2) A User might have numerous online records with various specialist co-ops and since recalling username/secret word blend of that load of records is troublesome, client once in a while pick same secret phrase on every one of the records making the record helpless against insider assault, word reference assault and so forth or the client will in general compose it on invention which might release their privileged data.

[004] to resolve these issues, scientists have proposed picture based secret word verification procedures called numeric graphical passwords which are viewed as solid and easy to understand. These are sorted as Recall based and Recognition based.

[005] Thus, to give secure and easy to use verification, the security specialists are unequivocally prescribing the online specialist co-ops to convey two factor confirmation systems to fortify security without compromising client comfort.

[006] In this section, the above issues are tended to by proposing an easy to use staggered validation instrument which permits the client to unreservedly pick simple to recall passwords dependent on a portrayal of clients individual pictures. At login, clients review and enter their secret word by seeing their pre-chosen pictures.

[007] Associations, everything being equal, for instance, independent companies, just as huge organizations, are as of now at different degrees of safety regarding data frameworks, like their PC frameworks and organizations, which present changing degrees of business hazard in their day by day tasks.

[008] For the most part, such associations have no successful method to decide if they are data security keen and regardless of whether they have the appropriate projects and administrations set up to be considered canny with respect to the security of their data.

[009] Further, regardless of whether they have a few frameworks set up to manage episodes which might think twice about security of their data, they have no viable method to ensure whether they are in a profoundly ready condition of preparation or essentially a fair condition of status if a particularly occurrence happens. Nor do they have a powerful method to assess whether specific projects which might be set up are set up at the ideal highlight manage such occurrences.

[010] a significant number of such elements work under the mixed up presumption that their data is secure or, for instance, that an interloper or programmer would not be spurred to attempt to access their data frameworks.

[011] Moreover, numerous such elements erroneously accept that their representatives know about and in consistence with the substances' prerequisites for keeping up with and working in a tied down climate comparative with the elements' data frameworks.

[012] such substances work under the supposition, yet with no affirmation, that data comparative with their items and administrations is classified and will stay private. They expect that their degree of hazard for a security break is low, when without a doubt the degree of hazard of such a break might be extremely high. Such unjustifiable suppositions themselves make an extra degree of business hazard.

[013] Different endeavors have been made to resolve the issues related with assessing and creating viable data security frameworks at various degrees of organizations with various degrees of refinement utilizing different degrees of innovation. Some of such endeavors work in certain pieces of business, and others work on data innovations as it were.

[014] some are invention-based. Nonetheless, none have been especially fruitful or compelling in including, characterizing, and arranging weaknesses, hazard, and dangers and giving data security framework arrangements at all degrees of business and innovation.

[015] There is a current need to give a somewhat basic and productive strategy and framework for assessing existing data security and for fostering a viable data security foundation.

OBJECTIVES OF THE INVENTION

- 1) The Objective of the invention is to provide a **FLSA-System**: Fifth-level Security Authentication System (Mobile, Laptop, PC, and Locker) is executives of data innovation assets and administrations are altered with

the appearance of Cloud Computing. The level of security 1: 6- Digit Password 2: Voice as a name, 3: Finger Print, 4: OTP, 5: ID- No as a Voice.

- 2) The other Objective of the invention is to provide a ban the current strategy and this technique is stretched out in this invention with the end goal that another degree of safety is added.
- 3) The other Objective of the creation is to give a customer capabilities in this procedure are conveyed to the specialist in encryption plan. A key is delivered for each login to encode customer nuances.
- 4) The other Objective of the creation is to give an assessment of the concocted method is done by learning the computational cost and correspondence cost of the proposed procedure.
- 5) The other Objective of the invention is to provide five levels with changing qualities which clarify where the element remains as to dangers and weaknesses to its data security anytime.

SUMMARY OF THE INVENTION

[016] yet, for the webbased systems like cloud, the security should be connected over the transmission channel as well. In cloud environment-each and every information-relating to customer approval is sent from customer to the cloud specialist for check and insistence.

[017] in such a case, there is a lot of chance for the attacker to intrude. To prevent this, concocted strategy gives security by changing the mysterious word with some encryption advancement. The mysterious key is consequently unscrambled by the laborer in the wake of getting the gathering key from the customer.

[018] the gathering key is genenerated basing on the data limits during login. The encryption time required for is given. The time expected to execute the designed method can be contemplated is given as:

[019] at customer side:

$$4y + d + 18y + 168y + 288y + 240 y$$

At worker side:

$4y + 18y + 168y + 288y + 240 'y'$ in the above verbalization tends to the time required for one fundamental movement and "d" addresses the time expected to go over the association that contain sections.

[020] the numerical characteristics given in the verbalization are taken around. As such, the numerical characteristics can be considered as a reliable C1. Then, the enunciation can be created as: $y.C1$ for time taken by the specialist and $y. C1 + d$

for time taken by the client machine The value of 'd' in the above enunciation, moves sometimes due to the availability of association or the delay, blockage, signal strength in the association, etc.

[021] to see a graphical mystery key, a customer gets a scrap of information for encryption from the specialist as OTP during login. To a great extent the OTP may be conceded in the association transmission and customer may interest for resend of the OTP.

[022] The Consequently,'d' endless supply of all the above said factors in the association and also the correspondence cost in the designed technique is 30 pieces for graphical and other required mystery word and 72 to 240 pieces for scholarly mystery state, which isn't by and large that procured.

[023] anyway the time required for the proposed plan is more to execute than the current systems, it gives better security to the customer accreditations in the cloud environment than the current strategies.

[024] It is a component and advantage of the current creation to give a procedure and structure to evaluating and encouraging an amazing information security establishment which portrays a lot of controls for looking over and compensating for shortcomings in each various leveled part, for instance, development and business measures.

[025] It is a further element and benefit of the current innovation to give a strategy and framework to assessing and fostering a data security foundation which outfits a method for characterizing and arranging the level of hazard related with data resources, where the danger is characterized as the financial worth, worth or openness or the reputational effect of a data resource.

[026] it is another element and benefit of the current creation to give a strategy and framework to assessing and fostering a data security foundation which helps an association in deciding the idea of dangers or weakness to the association's data frameworks.

[027] it is an extra element and benefit of the current creation to give a strategy and framework to assessing and fostering a data security foundation which bears the cost of apparatuses for evaluating and investigating the effect of dangers to an association's data frameworks and prescribes answers for manage such dangers.

[028] To accomplish the expressed and different elements, benefits, and articles, an encapsulation of the current creation strategy and framework for assessing data security for a substance which utilizes a data security assessment model lattice having, for instance, five distinct levels with shifting attributes which clarify where the element remains concerning data security hazards at some random time.

[029] the strategy and framework for an exemplification of the current development incorporates, for instance, distinguishing at least one data security assets identified with a data security space of the element, like a hierarchical climate region, a business responsibility region, an arrangement and guidelines region, and a data security projects and administration space of the element. The ID can be performed either physically or can be gotten on a PC program running on a PC, like a PC.

[030] In the strategy and framework for an exemplification of the current development, the data assets identified with the authoritative climate space of the element relates, for instance, to at least one corporate construction assets and obligation and responsibility assets.

[031] The business responsibility space of the element relates, for instance, to at least one administration assets, financing assets, occurrence the board assets, mindfulness and instruction assets, tasks assets, data possession assets, and data order assets.

[032] the approach and guidelines space of the substance relates, for instance, to at least one presence and upkeep assets and requirement and estimation assets. The data security projects and administrations space of the element relates, for instance, to at least one counteraction assets, identification assets, and confirmation assets.

[033] In the strategy and framework for an encapsulation of the current creation, data is gotten around at least one data security attributes for the recognized data security asset which is characteristic of a pre-characterized hazard level for the data security of the substance and which likewise demonstrates a pre-characterized level of availability of the element to manage a danger to the data security of the element.

[034] The pre-characterized levels of preparation incorporate, for instance, a smug degree of status, an affirmation level of availability, a reconciliation level of status, a typical practice level of preparation, and a persistent improvement level of preparation. In like manner, the data can be assembled and gotten physically or can be gotten by entering on the PC program running on a PC, like a PC.

[035] Portable security frames a vital part of a business' general security methodology. The utilization of cell phones impacts all size organizations from little to huge, featuring the requirement for a powerful portable security arrangement. Recently, Gartner Research delivered a report posting five degrees of versatile security that can assist business with leading an evaluation.

[036] the every business ought to evaluate their own reaction and groundwork for portable security while likewise considering the degree of safety needed for their particular necessities. A few associations like medical care and monetary require a

more significant level of safety because of the affectability of data traded and the administrative consistence necessities.

[037] Then again, a few organizations direct a strong portable commitment with clients and organizations the same. A far reaching arrangement will think about the manner in which portability works inside a given business.

- 1) Level 1 – Defined Basic
- 2) Level 2 – Plan Managed
- 3) Level 3 – Unique Structured
- 4) Level 4 – Numeric Strategic
- 5) Level 5 – Programmable Optimizing

[038] Developments up each level requires a venture of assets inside the association and the higher two levels clearly take the most time and cash to carry out. Not all associations require a similar degree of portable security.

[039] as you consider your business according to the security levels recorded underneath recall that Integracon can assist you with fostering an essential arrangement for addressing all your security arrangements from versatility to organizations to security reviews.

If it's not too much trouble, remember us for all your security challenges.

Level 1 – Defined Basic

[040] At an essential level, numerous associations have an ambiguous thought of the requirement for some sort of versatile security, however they do not have a consciousness of portable uses inside the organization and different security challenges that are now present.

[42] At this level, organizations are basically starting to discuss the requirement for security and the particular difficulties of their given association. Frequently, organizations end up in conversation because of a security issue that was associated with cell phones.

[43] There might be some restricted safety efforts set up, yet they are not overseen reliably if by any means, and practically zero spending plan has been saved for versatile security. The vital test at this level is to get the board support as far as obligation to foundation improvement and strategy authorization.

Level 2 – Plan Managed

[44] As associations get familiar with their present difficulties and the business benchmarks for versatile security, they can start to address difficulties by alleviating dangers and shutting holes in security. The administration related to a security advisor has started to zero in on the specific difficulties and fosters an arrangement of reaction.

[45] This will include building up and executing versatile approaches, presenting medium level safety efforts, carrying out cell phone the board (MDM), continuous security wellbeing checks, and some sort of fundamental profiling and job based admittance.

Level 3 – Numeric Structured

[46] The move of level 2 to even out 3 will be a significant test, yet will likewise bring about the emotional improvement of versatile security. Presently the board has put resources into a versatility administrator who assumes liability for portable security.

[047] MDM is presently pushing ahead in an organized way with proactive security arrangements being carried out among labor force as a well as a far reaching security plan for portable admittance to email and schedule.

[048] The business is following industry-wide accepted procedures including things like decommissioning gadgets and far off cleaning measures inside a brief period (48 hours). The organization is additionally directing customary reviews with infiltration testing, and progressed security instruments are set up for overseeing gadgets, applications, content and that's only the tip of the iceberg.

Level 4 – Numeric Strategic

[049] Changing from level 3 to 4 requires speculation and extensive combination endeavours. Organizations with consistence necessities ordinarily focus on level 4-security. Portable security at this stage in coordinated inside the general security methodology of the organization.

[050] At this level, business should fulfil explicit guidelines like danger oversight, direct contribution from the security division, on-going input about portable security imparted to security office to assist with melding key arranging. On-going assortment of safety measurements and reaction plans assume a critical part at this level. The product at this level backings progressed MDM with granular control.

Level 5 – Programmable Optimizing

[051] Level 5 is for organizations that consider portability the essential driver of business development. These business use versatility vigorously for A2Band P2P commitment, at this level, organizations are driving change in portable security and in any event, prompting programming organizations for future portable security improvement. In these cases, the CIO might assume a vital part in portable security and may consistently cover versatility to the board.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: FLSA-System: Fifth-level Authentication System (Mobile, Laptop, PC, And Locker) Flow.

FIG.2: FLSA-System: Fifth-level Authentication System (Mobile, Laptop, PC, And Locker)

Block Diagram

FIG.3: FLSA-System: Fifth-level Authentication System (Mobile, Laptop, PC, And Locker)

Login Display

DESCRIPTION OF THE INVENTION

[52] The created procedure relies upon cream strategy which uses more than one security module. The best strength of this technique is no module woks independently. For example, if an assailant gets either text based or graphical mystery key of a customer, it alone doesn't work. The ensuing mystery word moreover is major for login.

[53] Another security point in this procedure is, for-every three progressive disillusionment-of customer UI, the confirmation shuts down and the ID is hindered for 24 hours with no past alarm given to the customer.

[54] In this fragment the correspondence and estimation cost of the proposed strategy is surveyed all together separate the viability of the computation.

[55] In the proposed methodology X-OR, X-NOR undertakings and association exercises are used at client similarly as laborer side. The computation and correspondence cost of proposed technique are given in Where 'x' addresses time required for performing one basic operation

[56] Time needed for offering contributions to login

Ta – Time needed for change into ASCII

Tb – Time needed for change into paired

Tc – Time needed for connection tasks

Tx – Time needed for X-OR activities

M – Memory needed for secret key

Cc – correspondence cost of secret key.

[57] The correspondence cost consolidates the constraint of imparting message drew in with the affirmation plot. At the customer side the constraint of transmission is: For text secret expression it shifts from 234 parts of 456 pieces. The image data base involves 6000 pictures and each and every image has an intriguing plan number related with it. For graphical and other required mystery key the photos are not sent over the channel to the laborer.

[58] But, the quantities of pictures are shipped off the worker and the worker matches them with the current picture secret phrase in the data set. Cloud based Web Application Firewalls (WAF) like Imperia can be utilized for additional assurance from SQL infusion assaults.

[59] Methods like Escaping, approving information, and Sanitizing can likewise be utilized to forestall X-Scripting or Cross Site Scripting assaults. Affirmation is one such issue. Especially for Password Authentication System, there is a risk of shoulder riding attack. This assessment presents an amazed non-graphical mystery word affirmation part by widening a current procedure. Client irected non-Graphical Password Scheme for Cloud using Caesar Cipher Technique.

[60] The assessment can be performed physically or naturally by a PC program running, on a PC, like a PC and incorporates, for instance, distinguishing at least one data assets of the element, getting data around at least one data security attributes for the recognized asset, sorting the data security trademark or qualities as indicated by a pre-characterized chain of command of hazard levels, and evaluating a level of business hazard for the element dependent on the arrangement.

WE CLAIMS

1. Our Invention FLSA-System: Fifth-level Authentication System (Mobile, Laptop, PC, and Locker) is leaders of information advancement resources and organizations are modified with the presence of Cloud Computing. The degree of safety 1: 6-Digit Password 2: Voice as a name, 3: Finger Print, 4: OTP, 5: ID-No as a Voice. Is the current procedure and this strategy is loosened up in this innovation with the ultimate objective that one more level of security is added. The customer capabilities in this methodology are conveyed to the laborer in encryption plan. A key is delivered for each login to encode customer nuances. The assessment of the proposed procedure is done by discovering the computational cost and correspondence cost of the proposed system. A technique and structure for evaluating information security and encouraging a convincing information security establishment for a component uses an information security appraisal model having, for example, five levels with changing characteristics which explain where the component stays as to risks and shortcomings to its information security whenever.

2. According to claim1# the development is to an Invention Fifth-level Graphical Password Authentication System (Mobile, Laptop, PC, and Locker) is chiefs of information advancement resources and organizations are modified with the presence of Cloud Computing. The degree of safety 1: 6-Digit Password 2: Voice as a name, 3: Finger Print, 4: OPT, 5: ID-No as a Voice.

3. According to claim1, 2, 3# the development is to boycott the current methodology and this procedure is loosened up in this creation with the ultimate objective that one more level of security is added.

4. According to claim1, 2, 3# the development is to customer capabilities in this methodology are imparted to the specialist in encryption plan. A key is created for each login to encode customer nuances.

5. According to claim1, 2, 3, 4# the development is to an assessment of the proposed procedure is done by learning the computational cost and correspondence cost of the proposed methodology.

6. According to claim1, 2, 5# the development is to five levels with changing characteristics which explain where the component stays as to risks and shortcomings to its information security whenever.

ABSTRACT

Our Invention FLSA-System: Fifth-level Security Authentication System (Mobile, Laptop, PC, and Locker) is executives of data innovation assets and administrations are altered with the appearance of mapped Cloud Computing. *The Fifth level of security 1: 6-Digit Password 2: Voice as a name, 3: Finger Print, 4: OTP, 5: ID- No. as a Voice.* Is the current system and this procedure is loosened up in this innovation with the ultimate objective that one more level of security assuming client required, added. The customer capabilities in this procedure are conveyed to the specialist in encryption interesting plan. A key is delivered for each login to encode customer nuances. The assessment of the created method is done by learning the computational cost and correspondence cost of the proposed procedure. A strategy and framework for assessing data security and fostering a compelling data security foundation for an element utilizes a data security assessment model having for instance, five levels (select at the registration time) with changing qualities which clarify where the element remains as to dangers and weaknesses to its data security anytime.

FORM 2
THE PATENT ACT 1970 &
 The Patents Rules, 2003
COMPLETE SPECIFICATION
 (See section 10 and rule 13)

TITLE OF THE INVENTION:

Intelligent Process and Methods for Casein Determination in Cow-milk only

Name	Nationality	Address
Applicant		
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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

FORM 2
THE PATENT ACT 1970 &
The Patents Rules, 2003
COMPLETE SPECIFICATION
(See section 10 and rule 13)

TITLE OF THE INVENTION:

Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of Uapaca Pilosahutch.

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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

FIELD OF THE INVENTION

Our Invention is related to an Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of Uapaca Pilosahutch.

BACKGROUND OF THE INVENTION

Throughout the long term the world conventional medication has been known to take its source from higher plants and their concentrates in the treatment of sicknesses and contaminations. Until nineteenth century, when the improvement of science and manufactured natural science began, therapeutic plants were the wellsprings of dynamic materials utilized in recuperating and relieving human illnesses. Prior to the coming of present day techniques for creating drugs, restorative plants, for example, *Allium sativum*, *Azadirachta Indica* and *Citrus limnonym* were utilized in treating both intestinal sickness and typhoid fever.

Additionally, some plant leaves were utilized in treating skin rashes and to mend wounds. In like manner, present day drugs depend intensely on these therapeutic plants for their natural substances, for example, cocoa leaves and opium plant from papaver species for analgesics. The dynamic standards of plants vary starting with one plant then onto the next because of the variety in organic exercises.

Conventional restorative practice has been set up for quite a long time in many regions of the planet. Various plants and spices are utilized all around the world by customary medication specialists. The training is known to differ starting with one country then onto the next. Concentrates from the different plant parts (leaves, stem bark and foundations) of different higher plants are utilized in natural medication creation. Plants' concentrates are given independently or as inventions for the treatment of different sicknesses. In genuine sense over 75% of the total populace rely upon these different types of inventions and home grown decoctions for the treatment of diseases.

Phytochemical constituents are the fundamental natural substances hotspot for the foundation of drug enterprises. The constituents present in the plant assume imperative parts in the rough medications character. Phytochemical screening is vital in distinguishing new wellsprings of restoratively and pharmacologically significant mixtures like alkaloids, anthraquinones, flavonoids, phenolic compounds, sapiens, steroids, tannins and terpenoid.

throughout the long term the world customary medication has been known to take its source from higher plants and their concentrates in the treatment of illnesses and diseases. Until nineteenth century, when the improvement of science and engineered natural science began, restorative plants were the wellsprings of dynamic materials utilized in recuperating and relieving human illnesses. Prior to the coming of current techniques for delivering drugs, restorative plants, for

example, *Allium sativum*, *Azadirachta Indica* and *Citrus limnonyms* were utilized in treating both intestinal sickness and typhoid fever.

Likewise, some plant leaves were utilized in treating skin rashes and to recuperate wounds. Moreover, present day drugs depend vigorously on these therapeutic plants for their unrefined components, for example, cocoa leaves and opium plant from *papaver* species for analgesics. The dynamic standards of plants contrast starting with one plant then onto the next because of the variety in organic exercises.

Customary therapeutic practice has been set up for quite a long time in many regions of the planet. Various plants and spices are utilized worldwide by conventional medication experts. The training is known to fluctuate starting with one country then onto the next. Concentrates from the different plant parts of different higher plants are utilized in home grown medication creation. Plants' concentrates are given separately or as mixtures for the treatment of different illnesses. In real sense over 75% of the total populace rely upon these different types of inventions and home grown decoctions for the treatment of contaminations.

OBJECTIVES OF THE INVENTION

- 1) The objective of the invention is to provide a "Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of *Uapaca Pilosahutch*" is a *Uapaca pilosa*(Hutch.) a plant utilized in certain pieces of Africa in the treatment of looseness of the bowels, feminine torment, fever, blockage, erectile brokenness, skin contaminations, female sterility, heap, ailment, emetic, tooth-inconveniences and weariness.
- 2) The other objective of the invention is to provide a dynamic of the multitude of divisions, prompted the disconnection of two mixtures GF1 and GF2. Their personalities were dictated by investigation of their ghostly information utilizing FTIR, 1D and 2D NMR. The designs of the mixtures were upheld by contrasting their otherworldly information and the writing. GF1 was observed to be botulin while GF2 was observed to be beta-sit sterol.
- 3) The other objective of the invention is to provide a antimicrobial screening of the rough concentrate and divisions utilizing agar well dispersion method showed action against *Staphylococcus aureus*, *Shigella dysenteries*, *Salmonella Typhi*, *Bacillus subtilis* and *Escherichia coli*.
- 4) The other objective of the invention is to provide a Zone of Inhibition of the plant separate against chosen microorganisms goes from 13mm to 17mm against *Staphylococcus aureus*, 10mm to 14mm against *Bacillus subtilis*, 12mm to 15mm against *Shigella dysenteries*, 15mm to 18mm against *Escherichia coli* and 10mm to 11mm against *Salmonella Typhi*.

- 5) The other objective of the invention is to provide a MBC for the concentrate, divisions and segregated mixtures not really set in stone and also the scope of Minimum Inhibitory fixation is between 6.25 mg/mL to 25 mg/mL for *Staphylococcus aureus*, 25 mg/mL for *Shigella dysenteries*, 6.25 mg/mL for *Bacillus subtilized* 12.50 mg/mL for *Escherichia coli* while the Minimum Bactericidal Concentration range between 12.50 mg/mL for *Staphylococcus aureus*, 50 mg/mL for *Shigella dysenteries*, 12.50 mg/mL for *Bacillus subtilis* and 25 mg/mL for *Escherichia coli*.
6. The other objective of the invention is to provide a phytochemical screening of crude plant extracts.
7. The other objective of the invention is to provide a antimicrobial screening of the crude extract of the plant,
8. The other objective of the invention is to provide a isolation and identification of phytochemicals present in the extracts and
9. The other objective of the invention is to provide a antimicrobial screening of isolated/identified compounds.

SUMMARY OF THE INVENTION

Uapaca pilosa (Hutch) has been utilized in numerous tropical networks in customary medication for the treatment of protozoa, microorganisms and parasites contaminations. Apparently, the photochemistry and antimicrobial movement investigations of *Uapaca pilosa* have not been considered. Subsequently there is need to approve the ethno medicinal employments of the plant.

Uapaca pilosa(Hutch.) a plant utilized in certain pieces of Africa in the treatment of dysentery, feminine torment, fever, obstruction, erectile brokenness, skin diseases, female sterility, heap, stiffness, emetic, tooth-inconveniences and weariness. The dried plant was removed, the concentrate was oppressed to phytochemical examination utilizing standard strategy uncovered the presence of alkaloids, flavonoids, anthraquinones, tannins, saponins, steroids, terpenoid and glycocides.

Broad silica gel segment chromatography of the ethyl acetate part of the stem bark separate, the most dynamic of the relative multitude of portions, prompted the seclusion of two mixtures GF1 and GF2. Their personalities were controlled by investigation of their ghastly information utilizing FTIR, 1D and 2D NMR. The designs of the mixtures were upheld by contrasting their otherworldly information and the writing. GF1 was observed to be botulin while GF2 was observed to be beta-sit sterol.

The antimicrobial screening of the unrefined concentrate and parts utilizing agar well dissemination method showed movement against *Staphylococcus aureus*, *Shigella dysenteries*, *Salmonella Typhi*, *Bacillus subtilized* *Escherichia coli*. The Zone of Inhibition of the plant extricate against chosen microorganisms goes from 13mm to 17mm against *Staphylococcus aureus*, 10mm to 14mm against *Bacillus*

subtilis, 12mm to 15mm against *Shigella dysenteriae*, 15mm to 18mm against *Escherichia coli* and 10mm to 11mm against *Salmonella Typhi*.

The MIC and MBC for the concentrate, parts and detached mixtures still up in the air. The scope of Minimum Inhibitory focus is between 6.25 mg/mL to 25 mg/mL for *Staphylococcus aureus*, 25 mg/mL for *Shigella dysenteries*, 6.25 mg/mL for *Bacillus subtilis* 12.50 mg/mL for *Escherichia coli* while the Minimum Bactericidal Concentration range between 12.50 mg/mL for *Staphylococcus aureus*, 50 mg/mL for *Shigella dysenteries*, 12.50 mg/mL for *Bacillus subtilis* and 25 mg/mL for *Escherichia coli*. This review on the stem bark extricate from *Uapaca pilosa*, utilized generally in certain pieces of Africa as a restorative plant for the treatment of different illnesses has affirmed that it has antimicrobial action against the microorganisms that cause a portion of these sicknesses.

Notwithstanding their immediate antibacterial exercises, optional metabolites have been found to act in a roundabout way as modulators of the movement of antibacterial specialists. In this work, a few anti-infection agents (CHL, TET, KAN, STR, and ERY) exercises were improved (2 to multiple times) on over 70% of the multidrug-safe microscopic organisms tried within the sight of *T. cacao* leaves, *P. vulgaris* leaves, *D. adults* seeds, and *A. Indica* barks removes. The microbes utilized in this work are multiresistant and overexpress efflux siphons as an obstruction instrument.

This proposes that previously mentioned concentrates could contain substances which can restrain the efflux siphons communicated in these microscopic organisms hence prompting an increment in the adequacy of anti-toxins. A few examinations have shown that polyphenols, particularly flavonoids, could work on the movement of anti-infection agents against safe bacterial strains. In this way, the presence of these metabolites in the most dynamic concentrates might be the beginning of the noticed anti-toxin potentiating movement.

Many instances of threat were likewise noticed and this could be because of the negative associations between the anti-toxins and the mixtures of the plant remove, driving, for instance, to the restraint of the dynamic gatherings of the anti-toxins. These consequences of this review demonstrate, interestingly, the capability of the tried plant extricates, principally removes from *D. delis*, *P. vulgaris*, *A. Indica*, and *T. cacao*, to turn around anti-toxin opposition.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: Isolation and Characterization of Bioactive Unique Complex Compounds from Stem bark Advanced Extract of *Uapaca Pilosa* Hutch Flow Chart.

FIG.2: Isolation and Characterization of Bioactive Unique Complex Compounds from Stem bark Advanced Extract of *Uapaca Pilosa* Hutch, Block Diagram.

FIG.3: isolation and characterization of bioactive unique complex compounds.

DESCRIPTION OF THE INVENTION

This work was intended to explore the antibacterial exercises of methanol separates from thirteen Cameroonian eatable plants and their anti-microbial potentiating impacts against Gram-negative multidrug-safe (MDR) aggregates. The stock micro dilution technique was utilized to assess the insignificant inhibitory focus (MIC) and negligible bactericidal fixation (MBC) of the concentrates, just as their anti-infection potentiating exercises. The phytochemical screening of the concentrates was done by the standard strategies. The consequences of phytochemical tests uncovered the presence of sterols, polyphenols, and tannins in the greater part of the tried concentrates, with different classes of optional metabolites being specifically disseminated.

Tried concentrates showed variable antibacterial exercises with MIC esteems going from 64 to 1024 µg/mL. Be that as it may, a few concentrates were essentially dynamic against specific bacterial strains: seeds concentrate of Theobromine cacao (64 µg/mL) against *Escherichia coli* AG100Atet and *Klebsiella pneumonia* K24, and the bark concentrate of *Uapaca guineensis* against *E. coli* ATCC 8739. The leaves concentrate of *T. cacao* showed the best MBC esteems (256 µg/mL) against *E. aerogenes* EA27. Some tried concentrates included concentrates from the leaves of *T. cacao* and *P. vulgaris*, and the seeds of *D. edulis* and barks *A.*

Indica has specifically improved (2-to 64-crease) the antibacterial exercises of a portion of the tried anti-infection agents, chloramphenicol (CHL), antibiotic medication (TET), kanamycin (KAN), streptomycin (STR), and erythromycin (ERY), against over 70% of tried MDR microscopic organisms. The discoveries of this work showed that tried plant separates and especially those from *T. cacao* and *Pharsalus vulgaris* can be utilized alone or in blend with customary anti-microbial in the treatment of diseases including multiresistant microorganisms.

Plant Material and Extraction

Plants utilized in this review were gathered in West, Southwest, and Center districts of Cameroon from March to April 2016. All plants gathered were recognized at the National Herbarium (Yaoundé, Cameroun) where the voucher examples were saved. The names just as the reference quantities of the concentrated on plants are displayed in Table S1 (Supplementary Materials). For the extraction, each plant material was cleaned and air-dried, and the powder (200 g) was absorbed methanol (Me- OH, 1 L) for 48 h at room temperature. The concentrate acquired was gathered by filtration utilizing Whatman channel paper n°.1 and concentrated under decreased strain utilizing a rotating evaporator to yield a build-up which established the plant extricate. Every one of the concentrates were then kept at 4°C until additional utilization.

Fundamental Phytochemical Investigations

The significant phytochemical classes, for example, triterpenes (Liebermann-Burkhardt test), sterols (Salkowski's test), alkaloids (Mayer's test), polyphenols

(ferric chloride test), flavonoids (aluminum chloride test), anthraquinones (Born Trager's test), saponins (froth test), and tannins (gelatine test) were examined as recently depicted.

Synthetic substances for Antibacterial Assays

Eight reference anti-microbial were utilized in this review: ampicillin (AMP), cefepime (CEF), chloramphenicol (CHL), ciprofloxacin (CIP), erythromycin (ERY), kanamycin (KAN), streptomycin (STP), and antibiotic medication (TET) which were acquired from Sigma-Aldrich, St Quentin Fallacies, France. p-Iodonitrotetrazolium (INT) (Sigma-Aldrich) chloride was utilized as microbial development pointer; dimethyl sulfoxide (DMSO) was utilized to disintegrate the plant remove.

Bacteria Strains and Culture Media

In this review, we utilized a board of 21 strains having a place with Gram-negative microbes including touchy and multidrug-safe strains of *Escherichia coli*, *Enterobacter aero genes*, *Enterobacter cloacae*, *Klebsiella pneumonia*, *Providencia staudtii*, and *Pseudomonas aeruginosa*. Their provisions were recently announced (Supplementary Materials, Table S2). These microorganisms were kept up with at 4°C and subcultured on a new Mueller Hinton Agar (MHA) for 24 h before any antibacterial test. Mueller Hinton Broth (MHB) was utilized for antibacterial examines.

Antibacterial Assays

MIC and MBC upsides of the various examples were dictated by micro dilution utilizing INT colorimetric measure as recently depicted. Momentarily, the examples were broken up in 10% dimethyl-sulfoxide (DMSO)/Mueller Hinton Broth (MHB) and sequentially weakened twofold (in a 96-well microplate). Then, at that point, 100 µL of inoculum (2×10^6 CFU/mL) ready in MHB was included each well. Chloramphenicol was utilized as reference drug and the well containing the vehicle (DMSO 2.5%) as control. The plates were then covered with a sterile plate sealer and tenderly shake to blend the substance of the wells.

After 18 h of hatching at 37°C, the MIC worth of each example, characterized as the most minimal example fixation that hindered total microorganism's development, was distinguished after expansion of 40 µL INT (0.2 mg/mL) and brooding at 37°C for 30 min. Feasible microscopic organisms decreased the yellow color to pink.

The MBC esteem was controlled by adding 50 µL aliquots of the arrangements, which didn't show any development after hatching during MIC tests, to 150 µL of MHB. Then, at that point, these arrangements were hatched at 37°C for 48 h. The MBC was viewed as the most minimal centralization of tests, which didn't deliver a shading change after expansion of INT as referenced above. Each measure was acted in three free tests in three-fold. In the event that there was distinction, the

MIC or MBC esteems were taken as the most every now and again happening esteems.

Antibiotic Resistance Modifying Assay

The obstruction changing action of the concentrates was assessed by deciding the MICs of anti-microbials in the presence or nonappearance of the plant extricates in the 96-wells adjustment examine as recently depicted. Momentarily, after sequential weakening of anti-infection agents (256–0.5 µg/mL), the plant separates were added at their sub inhibitory focuses (MIC/2 and MIC/4) chose after starter study surveyed against *P. aeruginosa* PA124 (Supplementary Materials, Table S3). The MIC of every not really settled as portrayed previously. Each test was acted in three autonomous tests in copy. Balance factors (MF), determined as MIC of anti-microbial alone/MIC of anti-toxin + extricate, were utilized to communicate the anti-infection potentiating impacts of the plant separates.

Antibacterial Activity of the Tested Extracts

Nineteen concentrates from thirteen plants just as chloramphenicol were tried for their antibacterial exercises on a board of 21 Gram-negative microbes. The aftereffects of Table 2 show that the tried concentrates A. Indica bark, *P. vulgaris* leaves, *H. esculents* leaves, *U. guineensis* leaves, and *D. edulis* seed) gave specific antibacterial action the recorded MIC esteems going from 64 to 1024 µg/mL. A few concentrates introduced expansive range of antibacterial movement. Their inhibitory exercises were seen on 18/21 (85, 71%, A.

indica bark and *P. vulgaris* leaves), 17/21 (80.95%, *H. esculentus* leaves), and 16/21 (76,19%, *U. guineensis* leaves and *D. edulis* seeds). The most minimal MIC esteem (64 µg/mL) was recorded with the concentrate of *T. cacao* wide bean (TCBB) against *E. coli* ATCC 8739, AG100ATet, and *K. pneumonia* K24 and that from bark of *U. guineensis* against *E. coli* ATCC 8739. By and large, MBC esteems were not recognized at up to 1024 µg/mL extricate focuses. Concentrate from *I. batatas* leaves (IBL) and *T. cacao* leaves (TCL) showed the best MBC esteems (256 µg/mL) against *E. aerogenes* EA27.

Anti-toxin Resistance-Modifying Activities of the Extracts

The antibacterial action of 6 normally utilized anti-microbial was assessed within the sight of plant extricates at the focuses comparable to MIC/2 and MIC/4. The outcomes acquired are summed up in Tables Tables333–9. From these tables, it was seen that a few concentrates specifically worked on the antibacterial exercises of tried anti-infection agents against the chose MDR microorganisms (2-to 64-crease decline of MIC). *D. delis* seeds extricate has fundamentally worked on the antibacterial exercises of CHL and KAN against 90% (8/10) and 80% (8/10) of the tried MDR microbes, separately.

The bark extract of *A. indica* and leaves extract of *P. vulgaris* (Table 6) also improved the activities of CHL, STP, and TET to about 80% (8/10) and 70% (7/10) of the tested MDR bacteria, respectively. The modulating effects were also observed after the combination of *T. cacao* leaves extract with STP, CHL, CIP, TET, and STP against 80% to 70% of the tested MDR bacteria (Table 8) whilst other extracts were less active.

The dried plant was removed, the concentrate was oppressed to phytochemical examination utilizing standard strategy uncovered the presence of alkaloids, flavonoids, anthraquinones, tannins, saponins, steroids, terpenoid and glycocides. Broad silica gel segment chromatography of the ethyl acetate part of the stem bark separate,

This review on the stem bark extricate from *Uapaca pilosa*, utilized customarily in certain pieces of Africa as a restorative plant for the treatment of different infirmities has affirmed that it has antimicrobial action against the organisms that cause a portion of these illnesses.

WE CLAIMS

- 1) Our invention “Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of Uapaca Pilosahutch” is a Uapaca pilosa(Hutch.) a plant utilized in certain pieces of Africa in the treatment of looseness of the bowels, feminine torment, fever, blockage, erectile brokenness, skin contaminations, female sterility, heap, ailment, emetic, tooth-inconveniences and weariness. The most dynamic of the multitude of divisions, prompted the disconnection of two mixtures GF1 and GF2. Their personalities were dictated by investigation of their ghostly information utilizing FTIR, 1D and 2D NMR. The designs of the mixtures were upheld by contrasting their otherworldly information and the writing. GF1 was observed to be botulin while GF2 was observed to be beta-sit sterol. The antimicrobial screening of the rough concentrate and divisions utilizing agar well dispersion method showed action against Staphylococcus aureus, Shigella dysenteries, Salmonella Typhi, Bacillus subtilis and Escherichia coli. The Zone of Inhibition of the plant separate against chosen microorganisms goes from 13mm to 17mm against Staphylococcus aureus, 10mm to 14mm against Bacillus subtilis, 12mm to 15mm against Shigella dysenteries, 15mm to 18mm against Escherichia coli and 10mm to 11mm against Salmonella Typhi. The MIC and MBC for the concentrate, divisions and segregated mixtures not really set in stone. The scope of Minimum Inhibitory fixation is between 6.25 mg/mL to 25 mg/mL for Staphylococcus aureus, 25 mg/mL for Shigella dysenteries, 6.25 mg/mL for Bacillus subtilized 12.50 mg/mL for Escherichia coli while the Minimum Bactericidal Concentration range between 12.50 mg/mL for Staphylococcus aureus, 50 mg/mL for Shigella dysenteries, 12.50 mg/mL for Bacillus subtilis and 25 mg/mL for Escherichia coli.
- 2) According to claim1# the invention is a “Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of Uapaca Pilosahutch” is a Uapaca pilosa(Hutch.) a plant utilized in certain pieces of Africa in the treatment of looseness of the bowels, feminine torment, fever, blockage, erectile brokenness, skin contaminations, female sterility, heap, ailment, emetic, tooth-inconveniences and weariness.
- 3) According to claim1,2# the invention is a dynamic of the multitude of divisions, prompted the disconnection of two mixtures GF1 and GF2. Their personalities were dictated by investigation of their ghostly information utilizing FTIR, 1D and 2D NMR. The designs of the mixtures were upheld by contrasting their otherworldly information and the writing. GF1 was observed to be botulin while GF2 was observed to be beta-sit sterol.
- 4) According to claim1,2,4,6# the invention is a antimicrobial screening of the rough concentrate and divisions utilizing agar well dispersion method

showed action against *Staphylococcus aureus*, *Shigella dysenteries*, *Salmonella Typhi*, *Bacillus subtilis* and *Escherichia coli*.

- 5) According to claim 1,2,3,4# the invention is a Zone of Inhibition of the plant separate against chosen microorganisms goes from 13mm to 17mm against *Staphylococcus aureus*, 10mm to 14mm against *Bacillus subtilis*, 12mm to 15mm against *Shigella dysenteries*, 15mm to 18mm against *Escherichia coli* and 10mm to 11mm against *Salmonella Typhi*.
- 6) According to claim 1,2,3,4# the invention is a and MBC for the concentrate, divisions and segregated mixtures not really set in stone and also the scope of Minimum Inhibitory fixation is between 6.25 mg/mL to 25 mg/mL for *Staphylococcus aureus*, 25 mg/mL for *Shigella dysenteries*, 6.25 mg/mL for *Bacillus subtilis* 12.50 mg/mL for *Escherichia coli* while the Minimum Bactericidal Concentration range between 12.50 mg/mL for *Staphylococcus aureus*, 50 mg/mL for *Shigella dysenteries*, 12.50 mg/mL for *Bacillus subtilis* and 25 mg/mL for *Escherichia coli*.

ABSTRACT

Our invention "Isolation and Characterization of Bioactive Unique Complex Compounds from Stembark Advanced Extract of *Uapaca pilosa* Hutch." is a *Uapaca pilosa* (Hutch.) a plant utilized in certain pieces of Africa in the treatment of looseness of the bowels, feminine torment, fever, blockage, erectile brokenness, skin contaminations, female sterility, heap, ailment, emetic, tooth-inconveniences and weariness. The most dynamic of the multitude of divisions, prompted the disconnection of two mixtures GF1 and GF2. Their personalities were dictated by investigation of their ghostly information utilizing FTIR, 1D and 2D NMR. The designs of the mixtures were upheld by contrasting their otherworldly information and the writing. GF1 was observed to be botulin while GF2 was observed to be beta-sitosterol. The antimicrobial screening of the rough concentrate and divisions utilizing agar well dispersion method showed action against *Staphylococcus aureus*, *Shigella dysenteries*, *Salmonella Typhi*, *Bacillus subtilis* and *Escherichia coli*. The Zone of Inhibition of the plant separate against chosen microorganisms goes from 13mm to 17mm against *Staphylococcus aureus*, 10mm to 14mm against *Bacillus subtilis*, 12mm to 15mm against *Shigella dysenteries*, 15mm to 18mm against *Escherichia coli* and 10mm to 11mm against *Salmonella Typhi*. The MIC and MBC for the concentrate, divisions and segregated mixtures not really set in stone. The scope of Minimum Inhibitory fixation is between 6.25 mg/mL to 25 mg/mL for *Staphylococcus aureus*, 25 mg/mL for *Shigella dysenteries*, 6.25 mg/mL for *Bacillus subtilis* 12.50 mg/mL for *Escherichia coli* while the Minimum Bactericidal Concentration range between 12.50 mg/mL for *Staphylococcus aureus*, 50 mg/mL for *Shigella dysenteries*, 12.50 mg/mL for *Bacillus subtilis* and 25 mg/mL for *Escherichia coli*.

FORM 2
THE PATENT ACT 1970 &
The Patents Rules, 2003
COMPLETE SPECIFICATION
(See section 10 and rule 13)

TITLE OF THE INVENTION:

Power Generation from Sea Wave and Create Renewable Energy.

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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

FIELD OF THE INVENTION

Our Invention is related to a Power Generation from Sea Wave and Create Renewable Energy.

BACKGROUND OF THE INVENTION

These days the mankind has an energy assets lacking and it attempt to confront it with new sustainable power sources rather than the old ones which are unreasonable and produce discharge of CO₂ and take steps to complete in couple of years. Thusly, we need to consider the seas like a decent source which can give us a measure of perfect and boundless energy.

Three fourth of the world's surface is covered by the sea. The vast majority of the energy that shows up from the sun to the earth is held by the water of the oceans. The seas resemble an extremely incredible sunlight based authority. Along this century, a few advancements have been explored to get the energy from the ocean. Today there are four kinds of inexhaustible sea's energy that are becoming fascinating for their great future viewpoints.

Wave power alludes to the energy of sea surface waves and the catch of that energy to accomplish valuable work. Ocean waves are an extremely encouraging energy transporter among inexhaustible force sources, since they can show a colossal measure of energy.

The worldwide wave asset because of wave energy is generally TW and Europe addresses around 320 GW, which is around 16% of the complete asset. Notwithstanding, for different reasons, it is assessed that main 10 to 15% can be changed over into electrical energy, which is an immense wellspring of energy, ready to take care of the current all world. In the end, wave energy could make a significant commitment by yielding as much as 120 TWH each year for Europe and maybe multiple times that level around the world.

The sea is a genuine store of sustainable power. It is accepted by some that just around 0.2 percent of the energy in sea waves could control the whole planet. The principle reasons of figuring waves are driving of wind just as the variance of strain beneath the water surface level. However, creating power from wave is certifiably not an as of late presented subject by any means, not many works have been finished utilizing the surface flood of sea contrasted with the arrangement of energy age from putting away an enormous measure of water and delivering it abruptly.

Sea Trader is a sort of coasting object which is somewhat lowered in the water. This examination is likewise about creating energy by utilizing some lowered items that are associated with a generator.

Flowing force turbines likewise have higher obligation cycle (half) than wave turbines (25%). Yet, there is one sort of turbine (Shrouded turbine) which might be

risky to marine life, since fish or marine well evolved creatures may get into the turbine sharp edges, through the Venture.

Waves create a spotless energy in light of the fact that no fuel is required and they don't deliver any waste. Shore based wave producing hardware is now drawing in resistance because of the enormous substantial developments on shorelines which are thought to obliterate visual scene. So proper separating of plants all through the tropical seas can almost dispose of any possible adverse consequences of OTEC processes on sea temperatures and on marine life.

Furthermore, a few waves frameworks can be uproarious when waves cross the establishment yet this can be supported with power age. In rundown, seaward wind and wave power ranches are unusual and temperamental energy sources which are dependent upon outrageous climate conditions requiring costly designed offices which need to withstand exceptionally destructive air/salt-water conditions.

For a given region: sun based produces kW, wind produces MW and sea flows produce GW. The seas cover 71% of the world's surface with flowing streams and ebbs and flows on all shores instead of the restricted locales for regular hydro dams. In view of primer studies the worldwide sea energy asset is assessed at more than 800,000 MW.

OBJECTIVES OF THE INVENTION

- 1) The objective of the invention is to provide a "Power Generation from Sea Wave and Create Renewable Energy" is this invention presents a short outline about the plan, advantages, hazard, and natural effect of an ocean wave power plant.
- 2) The other objective of the invention is to provide a expectation of this achievement is to serve society without hampering natural biology and also this errand depends on the inexhaustible ocean wave energy. Consuming petroleum derivative causes a dangerous atmospheric devotion. Again misuse of thermal energy station are exceptionally risky.
- 3) The other objective of the invention is to provide a plant yields incredible turn of living souls. The force age from ocean wave has development an enormous possibility.
- 4) The other objective of the invention is to provide a petroleum derivative is rising step by step due to its shortage in nature. As the working expense of ocean wave power plant is low and uses a sustainable wellspring of energy, it is feasible to deliver power at low cost.
- 5) The other objective of the invention is to provide a Existing hydrostatic force plant needs dam and also this is extremely destructive for ecological biology and lives variety.

- 6) The other objective of the invention is to provide a proposed plant doesn't need any dam or some other unsafe development and this additionally decreases the establishment cost.
- 7) The other objective of the invention is to provide a anyway it is dependable, supportable, harmless to the ecosystem power extraction strategy from ocean wave.

SUMMARY OF THE INVENTION

There is sprocket framework among wrench and shaft. The sprocket framework advances only single direction pivot of the shaft. At the hour of up development of void vessel shaft is locked in with wrench, however at the descending development of void vessel sprocket framework set wrench liberated from shaft. Consequently, shaft pivots when an unfilled vessel rises yet the shaft doesn't react to the descending development of the vessel. In reality there is the irregular development of void vessel so shaft development isn't uniform.

To eliminate this trouble a fly wheel is associated with the shaft. Fly wheel offer the chance to the shaft to pivot consistently. Vibration might hamper the absolute design; however complete construction will be made thinking about vibration. It will be viewed as the reverberation because of ocean wave, void vessel development, wind stream earth quack and what not The entire world is under the danger of contamination. It incorporates water contamination, air contamination, soil contamination and so forth

The current force plants are to a great extent answerable for these dangers. Thermal energy station has radiation peril. Dam or other design might cause biological uneven characters. It likewise makes stream contamination and salt contamination the tropical region. Diesel or coal power plant transmit immense measure of CO₂, SO₂ and NO₂. These causes corrosive downpour and collect obliteration.

The discharge from diesel and coal power plant is profoundly answerable for Green House impact for example a dangerous atmospheric devotion. Dams utilized in the creation of flowing force can raise tide levels. Harms like decreased flushing, winter icing and disintegration can change the vegetation of the space and disturb the equilibrium. Though, the ocean wave power plant is liberated from any sort of ecological contamination. Wave energy is sustainable, spotless and unpolluted.

There is no carbon dioxide or some other results delivered. It doesn't create ozone depleting substances or other waste. As it is inexhaustible, it will assist with diminishing our dependence on the consuming of petroleum products. Wave is consistently accessible so it is solid.

The innovation of sea wave is as yet adolescent. It has been genuinely conceivable to show a force age plan in this invention. It has been showed that the proposed plan of force creating from wave has some great unmistakable components which

makes it conceivable to be sustainable and ecofriendly process. Due to the straightforward plan and simple activity, it requires low support cost.

It requires not very many working expense that makes it the least estimated power. Since it is sustainable it very well may be a never-ending process. Its working expense is extraordinarily low. Whenever you have fabricated it, the energy is free since it comes from the sea's wave power. Gauge what measure of force age will make an organization productive. For this reason, cost volume investigation has been shown.

It will achieve income which will overflow all out cost at 50Mw. Accordingly, wave power plant can be built because of its maintainability, sustainability, eco-accommodating and cordial to the climate.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: Power Generation from Sea Wave and Create Renewable Energy Flow Chart.

FIG.2: Power Generation from Sea Wave and Create Renewable Energy Block Diagram

FIG.3: Power Generation from Sea Wave and Create Renewable Energy.

DESCRIPTION OF THE INVENTION

This review presents a far reaching audit of the sea wave innovation and possibilities of the wave energy entrance to take into account clean worldwide energy interest. A sea wave is an astounding energy asset, however it presents a tiny offer in the worldwide energy blend due to different difficulties and limits experienced to release its latent capacity.

This review assesses seriously the complicated boundaries to the sea energy innovation organization. The current and forthcoming significant wave energy projects are broadly analyzed to recognize the learned examples and upgrade conceivable mechanical answers for close the hole in the energy market. Moreover, restricting and propelling elements to encourage the worldwide wave energy potential development are profoundly examined to light new research bearings and promising arrangements.

Specifically, the wave energy converters as the supporting empowering innovation are completely researched with respect to their specialized availability, dependability, intensity and basic difficulties. To finish the force condition, conceivable energy transformation stages, matrix association and incorporation issues are managed in a wide perspective on the wave energy power framework. In the long run, this review targets giving a refreshed sea wave innovation survey and progress while acquainting new examination hole with quick track commitments in the worldwide energy blend.

A few works have been accounted for, which relate to sea wave energy innovation for electric force age in the past present an audit enumerating the wave energy innovation and different mechanical ideas for PTO and WEC frameworks thinking

about both close to shore and seaward areas. In this work the accentuation is put on broad specialized audits and different principal WECs ideas.

A profound audit on the development and original acts of the WECs is accounted for by Falcao. These literary works conveyed a theoretical investigation of the wave energy innovation and appraisal of the past age. Then again, the audit of electrical control strategies for various WEC gadgets is accounted for in. It was seen that the control apparatuses may fundamentally affect plan intricacy and energy catch of the WEC gadgets.

It is worth to stretch that transient and spatial variety investigations of the wave energy assets are considered exceptionally basic to recognize possible areas with high wave energy catch. Additionally, this information provides some insight into the plan provisions and limit of the WECs that could be appropriately sent at the specific ocean areas. Note that the successful wave power thickness (kW/m) is straightforwardly relative to the square of the critical wave plentifulness and intermittent length of the occurrence waves.

To this end, the evaluation of the wave energy assets utilizing WW3 model in Central Chile is accounted for in. This review depends on the close to shore area and it inferred that there is a potential wave energy force of greatest 5 MW each year with a vivacious wave tallness of 3.5 m inside a time of 11 s. look at five-year occasional varieties and normal force of the wave assets in the Bhai Sea by applying a further developed SWAN model.

It is tracked down that the biggest wave tallness is 2.5 m with energy time of 5 s and the most extreme normal force is 3.5 kW/m . In the spatial and transient varieties of wave energy in the Caspian Sea are explored utilizing a SWAN wave model.

The review surveys the close to shore between yearly varieties of normal wave power that shows critical manageability. In the wave energy variety characters, for example, fleeting, occasional, month to month and between yearly are assessed under the close to shore area in the Gulf of man. Similar examinations are accounted for different nations like Canada and Australia.

WE CLAIMS

1. Our Invention “Power Generation from Sea Wave and Create Renewable Energy” is a This invention presents a short outline about the plan, advantages, hazard, and natural effect of an ocean wave power plant. The expectation of this achievement is to serve society without hampering natural biology. This errand depends on the inexhaustible ocean wave energy. Consuming petroleum derivative causes a dangerous atmospheric devotion. Again misuse of thermal energy station are exceptionally risky. Mishap of this plant yields incredible turn of living souls. The force age from ocean wave has development an enormous possibility. The cost of petroleum derivative is rising step by step due to its shortage in nature. As the working expense of ocean wave power plant is low and uses a sustainable wellspring of energy, it is feasible to deliver power at low cost. Existing hydrostatic force plant needs dam. This is extremely destructive for ecological biology and lives variety. In any case, this proposed plant doesn't need any dam or some other unsafe development and this additionally decreases the establishment cost. Anyway it is dependable, supportable, harmless to the ecosystem power extraction strategy from ocean wave.
2. According to claim1# the Invention is to a “Power Generation from Sea Wave and Create Renewable Energy” is this invention presents a short outline about the plan, advantages, hazard, and natural effect of an ocean wave power plant.
3. According to claim1,2,# the Invention is to a expectation of this achievement is to serve society without hampering natural biology and also this errand depends on the inexhaustible ocean wave energy. Consuming petroleum derivative causes a dangerous atmospheric devotion. Again misuse of thermal energy station are exceptionally risky.
4. According to claim1,2,3# the Invention is to a plant yields incredible turn of living souls. The force age from ocean wave has development an enormous possibility.
5. According to claim1,2,3,4# the Invention is to a petroleum derivative is rising step by step due to its shortage in nature. As the working expense of ocean wave power plant is low and uses a sustainable wellspring of energy, it is feasible to deliver power at low cost.
6. According to claim1,2,4# the Invention is to an Existing hydrostatic force plant needs dam and also this is extremely destructive for ecological biology and lives variety. And also in any case, this proposed plant doesn't need any dam or some other unsafe development and this additionally decreases the establishment cost.

ABSTRACT

Our Invention “Power Generation from Sea Wave and Create Renewable Energy” is a This invention presents a short outline about the plan, advantages, hazard, and natural effect of an ocean wave power plant. The expectation of this achievement is to serve society without hampering natural biology. This errand depends on the inexhaustible ocean wave energy. Consuming petroleum derivative causes a dangerous atmospheric devotion. Again misuse of thermal energy station are exceptionally risky. Mishap of this plant yields incredible turn of living souls. The force age from ocean wave has development an enormous possibility. The cost of petroleum derivative is rising step by step due to its shortage in nature. As the working expense of ocean wave power plant is low and uses a sustainable wellspring of energy, it is feasible to deliver power at low cost. Existing hydrostatic force plant needs dam. This is extremely destructive for ecological biology and lives variety. In any case, this proposed plant doesn't need any dam or some other unsafe development and this additionally decreases the establishment cost. Anyway it is dependable, supportable, harmless to the ecosystem power extraction strategy from ocean wave.

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FORM 2
THE PATENT ACT 1970 &
 The Patents Rules, 2003
COMPLETE SPECIFICATION
 (See section 10 and rule 13)

TITLE OF THE INVENTION:

SV-Calculator: Scientific Voice Calculator.

Name	Nationality	Address
Applicant		
MAHATMA EDUCATION SOCIETY'S PILLAI HOC COLLEGE OF ARTS, SCIENCE AND COMMERCE	AN INDIAN NATIONAL	MAHATMA EDUCATION SOCIETY'S PILLAI HOC COLLEGE OF ARTS, SCIENCE AND COMMERCE RASAYANI TALUKA KHALAPUR DISTRICT RAIGAD MAHARASHTRA 410207, INDIA.
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REAMBLE TO THE DESCRIPTION

PROVISIONAL	COMPLETE
The following specification describes the	The following specification Invention. Particularly describes the invention and the manner in which it is to be performed.

FIELD OF THE INVENTION

Our Invention is related to a **SV-Calculator**: Scientific Voice Calculator.

BACKGROUND OF THE INVENTION

The adding machine of the current development remembers a clock mode for which the mini-computer amasses and shows the hour of day (continuous) or, on the other hand can be set to show the time occasions occur (stopwatch), the slipped by time between occasions or the past season of a few occasions starting simultaneously and finishing at various occasions (parts).

Activity of the clock mode depends on a significantly steady number of program guidelines executed by the mini-computer each 100th of a second as constrained by an expert oscillator.

During clump handling, the memory of a PC is regularly unloaded to allow a cautious assessment by developers or frameworks investigators. This unloading system is most effectively acted in a hexadecimal framework if the PC gathers double pieces in gatherings of four.

Ordinarily, the recipient of such a dump posting ought to translate the exercises of the machine program similar to the more normal decimal numbering system. The change between the decimal and hexadecimal base structures is an inconvenient strategy and limits the accommodation of dump postings.

It would be extraordinary if the machine customer had the alternative to be as acquainted with a hexadecimal structure as he is in a decimal system. In the event that this was possible, he would not be concerned with the change between the two bases. The current improvement permits the customer to perform commonly logarithmic and number shuffling undertakings in a hexadecimal base and convert among hexadecimal and decimal.

Regardless the above handiness of this creation to the programmer and systems engineer, it is a particularly significant gadget for showing the essential thoughts of number juggling. For example, the significant exercises of math and polynomial math are liberated from the numerical base used. Incredibly, these thoughts are regularly trained in a way which convinces the understudy to feel that they are only significant in the conspicuous decimal system.

With the current advancement, the instructor may show various huge number shuffling and arithmetical norms in the less unmistakable hexadecimal base and a while later difference the last answers and the decimal results. Further, it isn't unexpected significant for a teacher to change over numbers in another structure, for instance, hexadecimal, to a decimal system while explaining the principal associations between number structures.

The analyst of this creation engages the instructor to perform assessments in the hexadecimal system and convert to decimal rapidly and definitively, thusly further fostering his educating ability. It should be esteemed that there are no known tables in presence of the hexadecimal logarithms of hexadecimal numbers, conveyed in hexadecimal.

Since these tables don't exist, the introduction of various arithmetical and mathematical assignments in hexadecimal base is particularly inconvenient even to one skilled in the craftsmanship. With the current turn of events, regardless, reference to such tables becomes unnecessary and the recently referenced errands are immediately performed.

The increase, extension, allowance, and division exercises including hexadecimal numbers have, until this time, been performed through perplexing tables and procedures, by far most of which are ordinarily implied back to a decimal base. The current creation makes even the most difficult assessments in hexadecimal base tolerably simple to perform.

The ideas of these earlier applications have made conceivable huge decreases in the expense of little close to home size adding machines. Proceeding with endeavors to decrease the expense of these items incorporate the plan of a solitary chip adding machine framework for use in huge limit mini-computers, for example, logical or business number crunchers.

The chip uncovered thus might be used in logical or business adding machines for example, since this chip has arrangements for various capacity registers, notwithstanding functional registers, just as adequate ability to address the more muddled numerical articulations and capacities utilized in logical and business number crunchers including, for instance, geometrical and logarithmic connections.

The current development identifies with a hexadecimal/parallel coded decimal organization number juggling unit for a chip and all the more explicitly a hexadecimal/twofold coded decimal configuration number-crunching unit for an electronic adding machine. A whole eleccalculator framework including the hexadecimal/parallel coded decimal math unit of this innovation is revealed.

The electronic adding machine uncovered is a sequential, word coordinated mini-computer; in any case, the math unit of this development isn't restricted to the kind mini-computer framework revealed. Electronic adding machines of the earlier craftsmanship have ordinarily been operable in a solitary mode, for example, in parallel coded decimal arrangement.

While a particularly single mode number-crunching unit might be appropriate for use in performing ordinary number-crunching capacities, it has been discovered that if the information being applied to the math unit addresses, for example, either the sensible status of tasks happening inside the mini-computer or twofold

coded decimal (BCD) numerals that having a number-crunching unit which consequently preforms the legitimate activities in parallel coded decimal.

OBJECTIVES OF THE INVENTION

1. The objective of the invention is to provide a further article in the achievement of the chief object of the development to enlist the outcomes in both the paired and octal frameworks.
2. The other objective of the invention is to provide a further article in the achievement of the chief item to enter either parallel or octal qualities into the machine.
3. The other objective of the invention is to provide a counter register of a working out machine esteems numerated either in the twofold. Octal or decimal framework.
4. The other objective of the invention is to provide a e-empower section into a computing machine of a multiplier factor in either the twofold, octal or decimal arrangement of numeration.
5. The other objective of the invention is to provide a specifically condition the division system of an ascertaining machine, by a solitary manual stroke, to begin and afterward to stop the division activity after remainder finishing in every one of a majority of orders. 7
6. The other objective of the invention is to provide benefits of the current creation will become obvious from the accompanying standard.
7. According to claim 1# the invention is to a VBI- Calculator: Voice Based Intelligent Calculator is a Base $(No)_n$ convert into a [Base $(No)_{n+1}$ Or Base $(No)_{n-1}$] battery fueled hand-held number cruncher for performing Number system converter, mathematical and logarithmic capacities.
8. The other objective of the invention is to provide a an electronic adding machine or microchip arrangement of the sort ideally having console input and a visual presentation is executed with a semiconductor chip having a hexadecimal/paired coded decimal configuration number-crunching unit for performing number-crunching procedure on numeric information.
9. The other objective of the invention is to provide a memory for putting away various guidance words and addressable because of the location put away in the location register, and guidance word decoder rationale for interpreting guidance words yielded from the guidance word memory and for controlling the number-crunching unit accordingly thereto.
10. The other objective of the invention is to provide a minimized electronic number cruncher involving a screen, electronic circuits, a mouthpiece, voice acknowledgment circuits which are replaceable relying on the setting of the verbal information to be gotten by the mini-computer and the language where the information is given.

SUMMARY OF THE INVENTION

The current innovation identifies with working out machines of the sort known as work area number crunchers conversely, with the huge scope fast electronic succession mini-computers, and especially concerns work area mini-computers in

which twofold as well as octal qualities might be entered and which perform computations with such qualities to show results which might be perused straightforwardly in the paired or potentially octal framework.

As particularly far as known, the utility of a work area type double octal number cruncher, stems primarily from the huge scope electronic adding machines which should be customized and set up for hundreds and ordinarily a great many successive computations during a solitary program. Since the majority of the huge scope number crunchers work in the twofold framework, an enormous piece of the programming should be done in the paired framework.

Up to this time, double computations occurrence to programming have been finished by paper and pencil, and it has been discovered that by the long hand strategy on paper, twenty minutes or more are needed to play out a solitary increase including a thirty digit paired multiplicand and multiplier; while, the machine of the current innovation requires under six seconds to play out a parallel augmentation issue of a similar greatness.

Different employments of the work area type twofold octal mini-computer regarding the enormous scope machines are too various to even think about referencing exhaustively, yet as instances of a couple of the many uses, it could be noticed that during their development, the huge machines should go through broad checking by free estimations generally in the double framework, and when the machines are placed into utilization it every now and again becomes vital during different phases of the program of consecutive computations to enter paired variables, all requiring numerous autonomous computations of parallel numbers which should be possible on the machine of the current innovation at an extraordinary saving of time.

The normal office representative is curious about with the octal and twofold frameworks of documentation, in this manner talented mathematicians have up until now been needed to play out the primer and free estimations episode to the programming and checking of the previously mentioned huge scope mini-computers.

The machine of the current innovation, then again, makes it workable for the normal office worker, practicing no more expertise than would be needed to work any business work area mini-computer, to play out the heft of such estimations, along these lines mitigating the mathematicians for more beneficial utilization of their time.

It is consequently a chief object of the current innovation to give a computing machine in which the passage keys and gatherer register numeral wheels which bear indicia communicated in the paired arrangement of numeration, and to mediate between the section keys and the collector register, an ascertaining component that is operable in the octal framework.

Likewise, it is an object of the current development to give a control proper to a perceptible yield gadget executed with strong state hardware for finding an ideal number of respite or quiet openings of time throughout the conveyance of discernible messages of time.

A primary element of the current development dwells in that interruption codes are set up to find these respite or quiet openings during the conveyance of a full-length discernible message of refreshed time, the delay codes being fit for being taken care of likewise to semantic data codes demonstrative of words to be perceptibly shown (e.g., "tadaima", "kara", "go", "ji", and so forth)

All the more especially, a perceptible yield gadget as per the current development contains a store implies for putting away the semantic data codes characteristic of words to be discernibly shown, a first control implies for bringing the phonetic data codes in preselected request from the store implies, a discernible yield implies receptive to the principal control implies for conveying perceptible words as per the etymological data codes brought from the store implies, and a subsequent control implies operatively connected with the delay codes for permitting the interruption codes to be put away inside the store implies along with the phonetic data codes.

The etymological data codes and the respite codes from the store implies in the preselected request of the words to be discernibly shown and the perceptible yield stop time allotments, and a discernible yield hindrance implies receptive to the interruption codes from the store implies for incapacitating the perceptible yield implies for an ideal period of time. Discernible messages conveyed from the perceptible yield gadget are made as normal as consistently discussion due to differing lengths of the stops as chosen by the presence of the delay codes.

BRIEF DESCRIPTION OF THE DIAGRAM

FIG.1: **SV-Calculator**: Scientific Voice Calculator, Flow Chart.

FIG.2: **SV-Calculator**: Scientific Voice Calculator, Block Diagram.

FIG.3: **SV-Calculator**: Scientific Voice Calculator

DESCRIPTION OF THE INVENTION

Method:

1. Decimal No convert into a binary no.
2. Decimal No convert into a base-3 no.
3. Decimal No convert into a Base-4 no.
4. Decimal No convert into a Base-5 no.
5. Decimal No convert into a Base-6 no.
6. Decimal No convert into a Base-7 no.
7. Decimal No convert into a Base-8 no.
8. Decimal No convert into a Base-9 no.

Reverse Method

1. Binary No convert into a Decimal no.
2. Binary No convert into a Base-3 no.
3. Binary No convert into a Base-4 no.
4. Binary No convert into a Base-5 no.
5. Binary No convert into a Base-6 no.
6. Binary No convert into a Base-7 no.
7. Binary No convert into a Base-8 no.
8. Binary No convert into a Base-9 no.

Intelligent Method:

1. Base $(No)_n$ convert into a $[Base (No)_{n+1} \text{ Or } Base (No)_{n-1}]$

Generally speaking, the calculator of this improvement joins a base part and a hexadecimal base scale thusly having hexadecimal numbers graduated in rising solicitation. The numbers are organized to detach the length of the scale into a greater part of segments described by indicia identifying with the hexadecimal numbers 1 through 10.

The indicia are unmistakably coordinated to isolate the scale into 15 critical segments, with each piece having graduations contrasting with fragmentary portions of all of the above hexadecimal numbers. The general spots of the numbers in regards to the start of the scale are a part of the hexadecimal logarithm of each number. Marker suggests versatile similar with the base part are obliged adding extends identifying with picked pieces of the scale and showing a resultant worth therefore.

Preferably, the overall spots of the hexadecimal base numbers in regards to the start of the scale are directed by the relationship $I (\log, 0 \log m l0)$, where I is the decimal depiction a hexadecimal number some place in the scope of 1 and 10 whose position on the scale isn't settled forever, and L is a sum tending to the incredible length of the scale.

For a straight scale, L tends to the full length of the scale in inches or centimeters for example, and for a round scale, L locations 360. The hexadecimal base scale enables the customer of the calculator to perform standard increase and division of hexadecimal base numbers rapidly and unequivocally.

The save assets of time is liberal while considering that clear duplication of two hexadecimal base numbers requires glancing through hexadecimal increase tables for the aftereffects of single hexadecimal numbers and subsequently passing on and including a way suggested by hexadecimal extension relations. This strategy is monotonous whether or not tables of hexadecimal increment and development are open.

This development further recollects a movement of various scales for use for mix with the recently referenced hexadecimal base scales to permit increase, division,

exponentiation, squaring, and the taking of square roots and logarithms in, concerning, and conveyed in a hexadecimal base.

An opposite hexadecimal base scale having an amazing length identical to that of the above-depicted hexadecimal base scale is given hexadecimal base numbers graduated likewise as the hexadecimal base scale, yet in the contrary bearing.

The numbers on the opposite hexadecimal base scale in a perfect world are planned to logarithmically isolate the length of the scale into 15 huge parts, with indicia contrasting with the hexadecimal numbers 1 through 10. The marker strategy for this creation is flexible near with the base means for adding extends identifying with picked portions of either the hexadecimal base or the converse hexadecimal base scale and showing resultant characteristics on both of the scales.

The opposite hexadecimal base scale is particularly important in playing out different exercises in hexadecimal including a couple of increments and divisions without the need of recording fragmentary things or leftovers.

This development further gives a hexadecimal logarithm scale to use in blend in with the hexadecimal base scale. The hexadecimal logarithm scale has hexadecimal base numbers straightforwardly graduated in climbing demand and obviously planned to parcel the scale into 16 bits of comparable length.

The scale's fundamental indicia identify with the hexadecimal parts between and 1, that is, 0, .1, .2, .3, .4, .5, .6, .7, .8, .9, .A, .B, .C, .D, .E, .F, and 1.0. The hexadecimal logarithm scale is used to discover hexadecimal mantissas of hexadecimal logarithms of numbers browsed the hexadecimal base scale.

The scale may moreover be used to figure exponentials of hexadecimal numbers in hexadecimal. The hexadecimal logarithm scale is moreover used in blend in with a collinear decimal logarithm scale (a straight depiction of the decimal parts some place in the scope of 0 and 1.0) and a pointer means to change over divisions between the hexadecimal and decimal bases. Also, fixed direct extension and derivation toward three tremendous figures in hexadecimal, at whatever point needed, is performed using the hexadecimal logarithm scale.

To address a wide extent of numbers, the so-called coasting point documentation is used by mathematicians and PCs the equivalent. In this depiction a number is tended to as a section times a power of the base; for example, the decimal base number 684 would be tended to as 0.684×10 . In an equal structure the number 11001.11 would be tended to as 0.110011×10 where last factor 10 is the twofold depiction of the number 2, that is, the establishment of the twofold system.

The sort 101 is the twofold depiction of the hexadecimal (and decimal) number 5 which identifies with number of spots that the matched point has been moved aside. Different PCs work in a twofold system anyway express results in a

hexadecimal base; that is, a floatingpoint number is tended to in memory as a hexadecimal part some place in the scope of 0.1 and 1.0 events a hexadecimal power of 10, such numbers should be in normalized structure.

The current improvement diminishes the difference in the kinds of such numbers to clear and fast exercises through hexadecimal powers of ten scale used in mix with a customary decimal base scale, i.e., a C or D scale. This scale is useful in changing over hexadecimal powers of the compute 10 their decimal reciprocals.

Change of extraordinarily tremendous and small drifting point numbers between the decimal and hexadecimal bases is as often as possible irksome and drawn-out considering the way that what may be contrasted with a hexadecimal power of 16 i.e., 10 not really set in stone. The hexadecimal powers of ten scales-lessens such changes to uncommonly fundamental and accurate assignments.

This advancement further considers usage of decimal change scales in blend in with the hexadecimal base scale for changing hexadecimal numbers over to decimal numbers just as the reverse way around. Each decimal change scale has an effective length identical to that of the hexadecimal base scale, and has decimal base numbers graduated in rising solicitation from 16^M to 16 , where M may address any number including 0. A best extent of scales fuses the entire numbers from 3 to +4.

The general spots of the numbers concerning the scale 'is a component of the hexadecimal logarithm of each number. Being utilized, fixed-point decimal increment and division can be performed using the decimal change scales, and resultant decimal characteristics can be expeditiously changed over to their specific hexadecimal reciprocals on the hexadecimal base scale. On the other hand, hexadecimal duplication and division can be performed using the hexadecimal base scale, with resultant characteristics being changed over rapidly into their decimal partners on the decimal change scales.

The advancement relates to a more modest electronic calculator like a pocket or wrist little PC, given a screen, electronic circuits and something like one working contraptions. Acknowledged number crunchers are, gave a control center through which the calculators are worked.

Such known calculators, paying little mind to how more modest their improvement is, are reasonably lumbering a result of the presence of the control center. Further, with known number crunchers for basic and quick action of the control center a particular proportion of association is ordinarily required.

The advancement is to chip away at alluded to calculators to give a bit and diminished electronic analyst who can be worked adequately with close to zero related information.

As shown by the turn of events, the analyst is given no short of what one working contraption which is affected by human voice that causes numerals or conceivably pictures to be followed through on the screen.

The development further contains an analyst having a recipient which is planned to get fundamentally only strong from a particular course whereby the movement of the smaller than expected PC is improved.

Further the advancement contains an analyst which is worked by voice affirmation and is given includes exchangeable activities to different tongues so that, the calculator is adaptable to be viably usable in various lingos.

The showing the outcomes thereof is furnished with a clock mode which plays out the capacity of a clock and shows constant or the capacity of a stopwatch and stores and shows the occasions at which recorded occasions have occurred. A working out gadget containing a base part, a majority of graduated scales organized on the base part and pointer implies helping out the scales for playing out an assortment of estimations.

The math unit is operable in a first mode for giving a yield from the number-crunching unit in parallel coded decimal configuration and in a subsequent mode giving a yield from the number-crunching unit in hexadecimal organization. The mini-computer is consequently receptive to numerals and images communicated in a chose language or dialects and this is changed through the hardware of the adding machine to be seen on an extended presentation unit. A mini-computer is additionally receptive to activity words,

for example, "increase", "partition", "add" and "take away", with the goal that the number cruncher does these capacities on the showed numerals and images. The number cruncher doesn't have a console and is of a little size, roughly ten centimeters long, one centimeter in width and one-half centimeter inside and out. It very well may be fused in a pen structure or, in a more modest variant, fused into a wristband or something like that. The mouthpiece is ideally unit-directional in spite of the fact that it might likewise be with the end goal that it gets voice signals from various bearings. The number cruncher is movable so unique chose acoustical decibel levels might be needed to impel the adding machine.

WE CLAIMS

- 1) Our invention **SV-Calculator**: Scientific Voice Calculator is a Base $(No)_n$ convert into a [Base $(No)_{n+1}$ Or Base $(No)_{n-1}$] battery fueled hand-held number cruncher for performing Number system converter, mathematical and logarithmic capacities. The scales are graduated in hexadecimal base numbers and decimal base numbers for use in making traditional math and logarithmic activities in both hexadecimal and decimal bases and for changing over between voice based users inputs defined based. An electronic adding machine or microchip arrangement of the sort ideally having console input and a visual presentation is executed with a semiconductor chip having a hexadecimal/paired coded decimal configuration number-crunching unit for performing number-crunching procedure on numeric information inputted by the console further, the framework ideally incorporates an information, a location register receptive to the information, a guidance word memory for putting away various guidance words and addressable because of the location put away in the location register, and guidance word decoder rationale for interpreting guidance words yielded from the guidance word memory and for controlling the number-crunching unit accordingly thereto. A minimized electronic number cruncher involving a screen, electronic circuits, a mouthpiece, voice acknowledgment circuits which are replaceable relying on the setting of the verbal information to be gotten by the mini-computer and the language where the information is given.
- 2) According to claim1# the invention is to a **SV-Calculator**: Scientific Voice Calculator is a Base $(No)_n$ convert into a [Base $(No)_{n+1}$ Or Base $(No)_{n-1}$] battery fueled hand-held number cruncher for performing Number system converter, mathematical and logarithmic capacities.
- 3) According to claim1,2,3# the invention is to a scales are graduated in hexadecimal base numbers and decimal base numbers for use in making traditional math and logarithmic activities in both hexadecimal and decimal bases and for changing over between voice based users inputs defined based.
- 4) According to claim1, 2, 3, 4# the invention is to an electronic adding machine or microchip arrangement of the sort ideally having console input and a visual presentation is executed with a semiconductor chip having a hexadecimal/paired coded decimal configuration number-crunching unit for performing number-crunching procedure on numeric information.
- 5) According to claim1, 2, 4# the invention is to a memory for putting away various guidance words and addressable because of the location put away in the location register, and guidance word decoder rationale for interpreting guidance words yielded from the guidance word memory and for controlling the number-crunching unit accordingly thereto.
- 6) According to claim1,2,5# the invention is to a minimized electronic number cruncher involving a screen, electronic circuits, a mouthpiece, voice acknowledgment circuits which are replaceable relying on the setting of the verbal information to be gotten by the mini-computer and the language where the information is given.

ABSTRACT

Our invention VBI- Calculator: Voice Based Intelligent Calculator is a Base $(No)_n$ convert into a $[Base (No)_{n+1}$ Or $Base (No)_{n-1}$] battery fueled hand-held number cruncher for performing Number system converter, mathematical and logarithmic capacities. The scales are graduated in hexadecimal base numbers and decimal base numbers for use in making traditional math and logarithmic activities in both hexadecimal and decimal bases and for changing over between voice based users inputs defined based. An electronic adding machine or microchip arrangement of the sort ideally having console input and a visual presentation is executed with a semiconductor chip having a hexadecimal/paired coded decimal configuration number-crunching unit for performing number-crunching procedure on numeric information inputted by the console further, the framework ideally incorporates an information, a location register receptive to the information, a guidance word memory for putting away various guidance words and addressable because of the location put away in the location register, and guidance word decoder rationale for interpreting guidance words yielded from the guidance word memory and for controlling the number-crunching unit accordingly thereto. A minimized electronic number cruncher involving a screen, electronic circuits, a mouthpiece, voice acknowledgment circuits which are replaceable relying on the setting of the verbal information to be gotten by the mini-computer and the language where the information is given.

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Application Details	
APPLICATION NUMBER	202121054595
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	25/11/2021
APPLICANT NAME	1 . Dr. C K PRASHANT 2 . REMYA MADAN GOPAL 3 . SUPARNA DEEPAK
TITLE OF INVENTION	NOVEL RADAR ABSORBING PAINT FOR MILITARY STEALTH TECHNOLOGY.
FIELD OF INVENTION	ELECTRONICS
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REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	17/12/2021

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E-MAIL (UPDATED Online)	
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PUBLICATION DATE (U/S 11A)	17/12/2021

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APPLICATION NUMBER	202121056486
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	06/12/2021
APPLICANT NAME	Ms. Remya Madan Gopal
TITLE OF INVENTION	CANCER THERAPEUTICS USING NANOPARTICLES BASED ON WARBURG EFFECT
FIELD OF INVENTION	CHEMICAL
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PRIORITY DATE	
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PUBLICATION DATE (U/S 11A)	14/01/2022

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PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	14/01/2022

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Dr. Chanakya Kumar Jha
Chief Editor & President
Asian Society for Scientific Research



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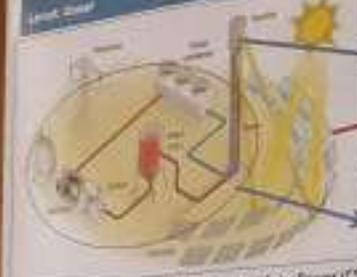
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9	8	7	6	5
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Concentrated Solar Power: A modified nonconventional and Efficient Energy Solution

Level: Zonal



Schematic diagram of proposed Concentrated Solar Power (CSP) Model Original CSP plant at Dubai

Why the Renewed Interest in CSP????

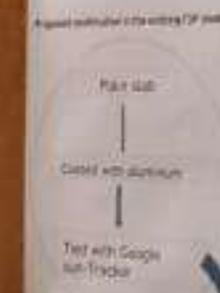
- Traditional CSP is not new, but not extensively used in India.
- There are only 7 places where the installation of concentrated solar power is going on.
- close resemblance to existing plants but more environment friendly
- It will be more effective in India as India is located near equator.
- concentrated high temperature solar heat substitutes combustion of fossil fuels or heat from nuclear reactors.

Information on CSP technologies

CSP technology systems use reflective surfaces to gather and concentrate unscattered solar radiation to create heat.

The requirement for unscattered ("direct normal") radiation limits CSP plants to certain locations, primarily desert regions with limited cloud cover.

Three of CSP technologies use the collected heat to power conventional Rankin steam cycles, similar to those used for coal and nuclear plants.



Advantages of this model

1. more than 88% reflectivity of aluminum
2. very cheap and minimum investment cost
3. clean energy

Advantages of this proposed model

- Low cost power plants.
- Generation is based on steam and is large scale
- can be built in small sizes and added to as needed.
- can achieve high steam operating temperatures, allowing more efficient power generation
- capable of combined heat and power generation steam for absorption chillers, industrial process heat, desalination
- Non-carbon emitting power generation
- Very much portable
- storage not major part of generation cost
- size of steam power plant that lacks storage does not have to be increased when storage added
- added storage cost effective if energy sold at peak hours
- allows generation to match utility load profile
- can be hybridized with intermittent renewable

Inter-University Ayubkar Research
Convention: 2019-2020

Topic: ZINAM

VOICE CONTROLLED CAR USING ARDUINO

Introduction

A voice controlled car using Arduino is a self-driving robotic vehicle through which commands are received by android.

The user sends commands through an android app to move the vehicle in Forward, Left, Right Directions.

Objective

The goal is to implement a software program on hardware. We have achieved this by creating a car system that can be controlled by humans from a distance.

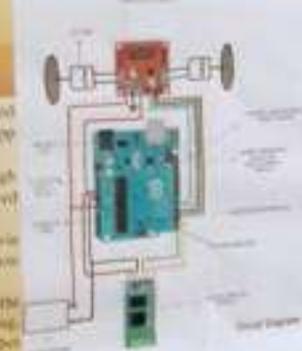
Working

A connection is established between the android speech recognition app and the Arduino.

When the user gives the command through the android speech recognition app, it is received by the Arduino via Bluetooth.

The commands are received by Arduino via the UART serial communication.

The program voice control checks the received data, if it is a matching string, it controls the movements of the robot (Forward, backward, right& left).



Components Used

Hardware requirements:

- Arduino Uno

Software requirements:

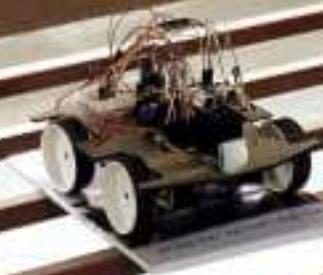
- Arduino IDE
- Android Studio
- Arduino IDE

Applications

- This voice controlled car can be used for various applications.
- It can be used as a fire alarm system by using smoke sensors.
- The robot is used to control the speed of a motor.

Scope

- To make this voice control system more efficient.
- To make this system more robust and reliable.
- To make this system more user-friendly.
- To make this system more secure.





NEW KEY TO GENETICS

Grab New Opportunities Daily

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SUSTAINABLE ECONOMIC DEVELOPMENT AND CLIMATE CHANGE

CATEGORY: UG



Natural Disasters In 2019

Understanding climate change and its impact on the world is the first step towards addressing the global environmental crisis.



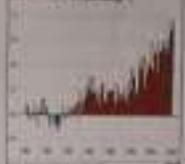
Understanding the impact of climate change on the environment is the first step towards addressing the global environmental crisis.



Greenhouse emissions by country



How the world is getting warmer



SUSTAINABILITY IN ECONOMICS

Sustainable economic growth is growth that meets the needs of the present without compromising the ability of future generations to meet their own needs. It involves balancing economic growth, social equity, and environmental protection.

What is climate change?

Climate change is a significant and long-term change in weather patterns and atmospheric conditions. Climate change makes the weather less predictable.

Causes of climate change: Greenhouse gases in the atmosphere trap heat, causing the planet to warm. Climate change is caused by the greenhouse effect.

What is sustainable development?

Sustainable development is the development that meets the needs of the present without compromising the ability of future generations.

GREEN TOURISM



WATER



SUSTAINABILITY IN CONSTRUCTION



WATER



552138





University of Mumbai
Department of Students' Development

**14th Inter-Collegiate/Institute/Department Avishkar
Research Convention
AY-2019-20**

College: Pillai HOC College of Arts, Science and Commerce, Rasayani
(CODE: 5-07)

**Zone: Raigad District
Consolidated Entry Form-I (for Research Project Fees)**

Sr.No	Category	Level	No. of Research Projects	Total No. of Participants	Entry Fees per Research Project	Amount
1	Humanities, Languages and Fine Arts	UG			50	0
		PG			50	0
		PPG			50	0
		TH			50	0
2	Commerce, Management and Law	UG	2	2	50	100
		PG			50	0
		PPG			50	0
		TH			50	0
3	Pure Sciences	UG	6	20	50	300
		PG			50	0
		PPG			50	0
		TH			50	0
4	Agriculture and Animal Husbandry	UG			50	0
		PG			50	0
		PPG			50	0
		TH			50	0
5	Engineering and Technology	UG			50	0
		PG			50	0
		PPG			50	0
		TH			50	0
6	Medicine and Pharmacy	UG			50	0
		PG			50	0
		PPG			50	0
		TH			50	0
Grand Total			8	22		400



University of Mumbai
Department of Students' Development

**14th Inter-Collegiate/Institute/Department Avishkar
Research Convention
AY-2019-20**

College: Pillai HOC College of Arts, Science and Commerce, Rasayani
(**CODE: 5-07**)
Zone: Raigad District
Consolidated Entry Form-I (for Research Project Fees)

Teacher Coordinator

College Seal

Principal

Date:

Place:



University of Mumbai
Department of Students' Development

**14th Inter-Collegiate/Institute/Department Avishkar
Research Convention
AY-2019-20**

College: Pillai HOC College of Arts, Science and Commerce, Rasayani (**CODE: 5-07**)
(**Zone: Raigad District**)

Consolidated Entry Form-II (for Registration of Research Project)

Category: Commerce, Management and Law

Level: UG

Sr.No	Project Title	Name	DOB	Class	Division	Roll No	PRN/PG Registration No.
1	A STUDY ON ENTREPRENEURIAL CHALLENGES & DEVELOPMENT	Mahato Prema Ramvilas (Presenter)	20/10/2000	Sy baf	N.a.	38	
2	Sustainable Economic Development and climate change	Kushwaha Priyanka Subhash (Presenter)	01/07/1999	Ty baf	N.a.	24	

Category: Pure Sciences

Level: UG

Sr.No	Project Title	Name	DOB	Class	Division	Roll No	PRN/PG Registration No.
3	Use of an azo dye as basic pH indicator	Parmar Sonalben Bhagwansingh (Presenter)	14/07/1999	Tybsc che	N.a.	26	2017016401840405
4	Use of an azo dye as basic pH indicator	Agiwale Meenakshi Mangesh	29/06/2000	Tybsc chem	N.a.	01	2017016401440416
5	Use of an azo dye as basic pH indicator	Bhoir Sayali Bhaskar	16/03/1999	Tybsc chem	N.a.	05	2017016401440625
6	ElectIt-A new indigenous software for online Voting process	Kazhanchikunnel Akhil Shaji (Presenter)	09/02/2000	Tybsc it	N.a.	31	2017016400976085
7	ElectIt-A new indigenous software for online Voting process	Dukare Rohan Chandrakant	01/06/2000	Ty bsc it	N.a.	12	2017016400978583
8	Look 360 - Grab New Opportunities Daily	Sonawane Prathamesh Ramdas	24/01/2000	Tybsc it	N.a.	63	2017016400977452



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(**Zone: Raigad District**)

Consolidated Entry Form-II (for Registration of Research Project)

9	Look 360 - Grab New Opportunities Daily	Rawat Deepak Umesh (Presenter)	29/12/1999	Ty bsc it	N.a.	55	2017016400976576
10	Concentrated Solar Power: A modified non-conventional and efficient energy solution model	Thorat Pratik Devidas (Presenter)	26/10/1999	Ty bsc ph	N.a.	07	2017016402669325
11	Concentrated Solar Power: A modified non-conventional and efficient energy solution model	Rajbhar Arjun Chediram	05/03/1998	Tybsc chem	N.a.	33	2017016401440374
12	Concentrated Solar Power: A modified non-conventional and efficient energy solution model	Mhatre Sagar Manohar	16/06/2000	Tybsc phys	N.a.	01	2017016401440745
13	Concentrated Solar Power: A modified non-conventional and efficient energy solution model	Mhatre Rohan Kamlakar	07/03/1999	Tybsc chem	N.a.	07	
14	Concentrated Solar Power: A modified non-conventional and efficient energy solution model	Panchal Shreekrushna Bharat	17/08/1999	Ty bsc che	N.a.	06	
15	Determination of Heavy metal content in water by Sensor	Prasad Ashish Kumar (Presenter)	07/08/1998	Tybsc che	N.a.	03	2017016401440672
16	Determination of Heavy metal content in water by Sensor	Verma Neha Baldevsingh	24/07/1999	Tybsc chem	N.a.	40	
17	Determination of Heavy metal content in water by Sensor	Koli Pooja Manoj	28/02/2000	Tybsc phys	N.a.	03	2017016401440664
18	Determination of Heavy metal content in water by Sensor	Rathod Shital Bharat	15/12/1999	Tybsc phys	N.a.	05	2017016401794065



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(**Zone: Raigad District**)

Consolidated Entry Form-II (for Registration of Research Project)

19	VOICE CONTROLLED CAR USING ARDUINO	Vishwakarma Pradeep Chotelal (Presenter)	15/04/1999	Tybsc cs	N.a.	33	2017016401440896
20	VOICE CONTROLLED CAR USING ARDUINO	Patil Sujit Ravindra	22/02/2000	Ty bsc it	N.a.	30	2017016400978552
21	VOICE CONTROLLED CAR USING ARDUINO	Solanki Viveksingh Mukesh	23/09/1999	Tybsc it	N.a.	63	2017016401866163
22	VOICE CONTROLLED CAR USING ARDUINO	Deshpande Atharv Prashant	27/06/1999	Tybsc it	N.a.	9	2017016400978544

The information given above is authentic and correct as per our record

Teacher Coordinator

College Seal

Principal

Date:

Place: