An Inception Framework to Diabetes Diagnosis with Techniques of Ai

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Abstract: The major problem in this world is death and as human beings we cannot escape from it. Even though research is going on to change a human being as immortals for our country it's a greater job to accept it. Coming to this paper treatments in the hospitals and reports by the doctors perceiving patient condition are varying from hospital to hospital. In this regard this paper illustrates a proposal prevailing all the treatments with regard to diabetes at home with the conjoin framework of several technologies.

Keywords - Conjoin, framework, illustrate, diagnosis.

I. INTRODUCTION

Diabetes is the most prevalent disease that is undergoing now a day. To estimate the level of diabetes and to estimate the level of patients' empathy are now a days challenging tasks to handle them. This paper tries to illustrate a new theory of fact that may not be proven now because of lack of sufficient infrastructure but it projects an outline which illustrates the technological development that is required in our country and innovations that deserve the path way to gateway to develop this as a huge project. Archimedes, a well known scientist being worked on the diabetes disease for years and developed a mathematical model that illustrates the patients symptoms to patients diagnosis in the form of a mathematical model that protests all the roots from the scratch level of empathy of patient like analyzing the patients present, past and future predictions of the patient with the pre diagnosis of a patient data that is available with us. All the equations that are described in the Archimedes model are described using a frontier transformation technique that is used in Mathematics but taking this into consideration a new model cannot be innovated because every model is related to three or more aspects Mathematics might be a combination of Logic and Logic may not be combined with Mathematics always. Prevailing to this technology as this technology illustrates a logical combinational framework customizing an integrated technology with a security domain added in it and a combination of several frameworks pertaining to networking are implemented and making a difference in the theory discussed by Archimedes a change over model with the security domain according to the recent trends and technologies and integrated as a whole into a new evolutionary technology.

II. TECHNOLOGIES USED/LANGUAGES USED

1. Python

As python is one of the important programming language that is prevailing now a day's its one of the most important language that is used to generate a WSDL file that is available to the customer particularly in the era of networking. Its also one of the major important language and easiest language in order to understand and write programs that are related to artificial intelligence and machine learning.

2. TIBCO BW

A middleware tool agent that makes several functionalities to the customers in making a predominant change between the database and the end user. This tool can be used as a part of networking in providing a EMS SERVICE or JMS SERVICE as the coding in JAVA is quite difficult in the generation of JMS SERVICES. This tool makes a combination of several palettes and its widely used by MNC companies and it is not available to all since the front end should meet the back end. This tool may not be sufficient for the access because it's a costly tool and requires a rapid change and infrastructure to implement this tool.

3.Image Processing

This is also a one scenario that is needed to get identified from the patient as the patient record is stored in the form of a DNA for all the records we need to estimate a good percentage of the DNA image to get identified. This is done with the process of image processing technique where we can get the data from the patient and process it and makes it as an ensemble approach.

4.Pattern Matching

This is one kind of identifying the patient's data that is to be matched with the other database of images when the pattern matches equally at a certain point of time the patient record can be elaborately explained and make it as a visionary progress of records for that particular patient.

5. Database

The patient's record is to be maintained in a particular database Preferably Oracle 11g or SQL

In order to develop an user interface in the front end the best Language preferred is the PHP

7. UNITY 3D

One of the higher level virtual reality tool to implement the applications As this tool is costlier and difficult to implement it as a service in our country especially to develop virtual reality applications it should have some constraints to implement and invoke.

8. R Programming

In order to elucidate a couple of records of the patients the best tool is the R programming tool where data can be captured in all records and the process of pattern matching is possible easily with the help of this programming language

III. FRAMEWORK DEVELOPMENT

As the theoretical aspect that is related to technology are discussed so far. A framework that is used to couple all the set of technologies is important to reconstruct this proposal in virtual to reality. The framework that is mentioned to coupling all the technologies mentioned is elaborated below in the following phases.

Phase1: DEVELOPMENT

Now a days in order to develop a new technology or new framework Threat from the hackers has become a serious and dangerous issue. So in order to have a good range of development of the application which provides a wide range of service to several customers the first thing before developing is security?

DEVOPS

In order to implement the development prospective in a secured and effective security is essential for the development and deployment of services. This can be achieved by forming a team of members that are associated with the security threats and alignment of operations involved in the project.

The development phase starts with working of a user interface development

UNITY 3d or PHP

The best way to implement a user interface programming is done through html or javascript in the older days. Due to advent of new technologies new eras came to take place and in this aspect PHP is the language to develop a user interface in a cost effective manner. But with the advent of new higher end secured VR applications coupling with the IoT it is preferable to develop the user interface using the unity 3d software. This is a costlier approach of implementing a user interface.

Phase 2: DEVELOPMENTAL MODEL

The best model that is preferred in the development is the agile model which has link up of all the phases.

USER INTERFACE DESIGN STRATEGY

By taking the above model into consideration the patient by just entering his ID and password can easily get the related data of the disease and the relevant images that are going to make his condition seriousness are displayed. Since the user id and passwords related to an organization are not secured there should be some new technology or a form that illustrates the patient's condition syndrome need to get accessed to the patients record that are linked with retinal scan or thumb. The patient's authorized and authenticated data are recorded and the treatments that are undergoing by the patient are to be sent to the doctor directly.

When the patient got the authorization and authentication of data the record of patient is directly sent to the prevailing doctor where the patient gets his treatment regularly and the doctor can avail the record of the patient when and where he is available. This is done by using the language python and by the AI propositional logics where the machine is learned with the application given to it.

Phase 3 DESIGN PHASE

In this phase the patient's record that we get from the user interface must be gathered analyzed and making it into a pattern and recognizing and authenticating takes place. In this phase the whole record of the patient should get some recognition using the patient's record and establishing as an identity where the data captured from the patient is validated.

This phase usually specifies the collaboration data of the patient with the patterns available in the system.

This phase is called as pattern matching phase.

Phase 3 MIDDLEWARE CONNECTIVITY

This is the phase where the two phases are combined together into a single phase.

This establishes the connection between the user interfaceProgramming and database.

This phase is usually performed by the tool called TIBCO BW which is the costlier tool to sent the data from the user interface to the customer level by checking all the available conditions.

As this is the costlier tool the best tool that is preferred here is PHP Admin to administrate all the front end and backend activities.

Phase 4 DATABASE CONNECTIVITY or SUPPORT

In order to generate a lot of services at one place and maintain them is the job of a database administration.

The best database that is used in providing all the services is the ORACLE 11g database.

This database is the best database to store the record of the patient's tables as well as the hospital tables.

The patient's check up list with the various hospitals and various doctor's are to be captured in this database.

If the database prescribed in the hospital is not ORACLE11g we need to develop an interface that converts the whole record of data into ORACLE11g.

Phase 5 NETWORK CONNECTIVITY

The server that is established with all the databases and services is to be handled in an appropriate way so that no issues can occur and properly handled from the client side prospective.

This is particularly a great job to ensemble couple of servers in a cloud and all are to be maintained with the properties of fault tolerance and load balancing that are ensemble into it.

It is better to maintain a single server for each hospital data and maintain them in a distributed environment so that the record of hospitals, doctors and patients may not be lost in a long run of time.

Phase 6 PATIENT DATA ANALYSIS

This is quite bigger task to analyze and issue the troubles of each patient record that is to identify the diseases and diagnosis that are undergoing by all the patients in the country. Since it's a bigger job R Programming language is used to capture the whole and sole analysis of the patients record and elaborately have a greater analysis task.

Phase 7 SECURITY

Since the framework comprises of several phases that are indulged in this service application SECURITY is the major domain and major threat that might occur from the hackers and this can be provided by various ways.

AUTHENTICATION AND AUTHORIZATION PROCESS

This process must be enlighten and tighten to analyze the unauthorized access from the users who use the above to hack the service application and create a fraud activities.

RED HAT TEAM

We need to develop a redhat team who identifies the whole security threats and remodeling them again based on the patients identities and records. This team thinks like the hackers in the project development and threatens from the outside hackers that are trying to hack the project activities.

SECURITY ANALYST

There should be a security analyst in the development of the application where he can identify the threats that might identify the issues occurring to security i.e. malwares and ramsomware that might occur when the code is being developed and the vulnerabilities that might occur when developing the code.

ZERO TRUST FRAMEWORK

This is one kind of test to all the developers who are developing the project.

Even though the developers developing the project may not be apt to make a change in the code and may become hackers when the project is being developed. In order to identify those people a zero trust framework must be accessed and make it as an outstanding forward ability to identify the hackers in the development of the project.

Phase 8 IMPLEMENTATION

This is the phase of implementation of service to all the people around the country and in almost every hospital in the country. As this is the progressive implementation of the service this service must be implemented first in the small town hospital where there is no technological development and later based on the pitfalls it may be redesigned and implemented in almost each and every hospital in the country.

Phase 9 TESTING

This phase deals with weather the application is working or not. This can be done by using the tests like white box or black box. The best way to test this application is by doing forward and reverse engineering to test the accuracy and efficiency of the Project

Phase 10 FEEDBACK

When the whole project was done the actual feedback from the end users must be regularly taken and maintained to improve the efficiency of the Project.

STAKEHOLDERS

The best way to illustrate any proposal is to earn money to run and make up the idea built into an income resource. To

Invest money in order to maintain the whole and sole project is to recognize the stakeholders who are willing to tie up with the project. Institutes that are having MOUS with the Government can become one of the stakeholders for this project. Organizations such as CSI may become the Stakeholders.

Government Organizations may also become the Stakeholders.

Out of all the Stakeholders students who are enthusiastic to become entrepreneurs can become the stakeholders to do this with the zero investment to become huge income resources establishing an organizational information system of their own.

IV. CONCLUSION

This proposal ensemble with all the technologies is just an initiation in the development of new era of technologies especially in our state as this proposal initiates a small idea of it where own project proposals can be generated of our own without depending on anyone. This framework is illustration towards the technological revolutionary theory where end user can enjoy its fruits when it is developed.

REFERENCES

- [1]. An Innovative Approach to Diabetes Diagnosis G.NageswaraRao, V.Swetha, M.RithvikG.NageswaraRao et al, / (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (3), 2015, 1986-1989
- [2]. Rahul Reddy Nadikattu. 2017. The Supremacy of Artificial intelligence and Neural Networks. International Journal of Creative Research Thoughts, Volume 5, Issue 1, 950-954.
- [3]. Sikender Mohsienuddin Mohammad, "AUTOMATION TESTING IN INFORMATION TECHNOLOGY", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.3, Issue 3, pp.118-125, August 2015, Available at :http://www.ijcrt.org/papers/IJCRT1133463.pdf
- [4]. Eddy DM1 ,Schlessinger L) Archimedes: a trial-validated model of diabetes.
- [5]. Sikender Mohsienuddin Mohammad, "IMPROVE SOFTWARE QUALITY THROUGH PRACTICING DEVOPS AUTOMATION", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.6, Issue 1, pp.251-256, March 2018, Available at :http://www.ijcrt.org/papers/IJCRT1133482.pdf
- [6]. Eddy DM, Schlessinger L) Validation of the Archimedes diabetes model. Diabetes Care 26: 3102-3110, 2003
- [7]. Schlessinger L, Eddy DM) Archimedes A new model for simulating health care systems: the mathematical formulation. J Biomedical Informatics 35: 37–50, 2002
- [8]. Rahul Reddy Nadikattu, 2014. Content analysis of Ame<mark>rican & Indian Comics on Instagram using Machine learning", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.2, Issue 3, pp.86-103.</mark>
- [9]. DPP-4 Inhibitors TatjanaÁbel National Health Center Hungary: A New Therapy of Type 2 Diabetes
- [10]. American Diabetes Association Standards of Medical Care in Diabetes 2015