Prepare an SRS document In line with IEEE recommended standards.

Automate Diagnosis & Consultant

Introduction:

The health problem is the gap between acceptable or desirable health status and the present status. In today's life, health problems are occurred more than last 25-30 years ago because of modernization, and industrialization. Suddenly, changes in the environment directly affect health conditions. So, more health-related problems are occurring day by day, requiring daily check-ups and health conditions. In such unprecedented times, with a fragile healthcare infrastructure, the medical facilities for people are scarce and even fewer for people with special needs. The healthcare sector got so preoccupied with Covid-19 cases that people with other ailments didn't even get a chance to avail of medical assistance. So, we are here to present a model to mitigate the scarcity of facilities & the lack of medical management. This project is based on real-time implementation as well as more informative and realistic it can be highly used in Medical Diagnosis and understanding of the different feasibilities of the model.

The objective of developing monitoring systems is to reduce time by reducing physician office visits, hospitalizations, and diagnostic testing procedures.

Implementation Features

Disease diagnosis using Machine Learning & Deep Learning Models

 • This project focused on many health issues from which not only India but the whole world is suffering. Visualize the dataset & using All ML & DL algorithms to diagnose Diseases.

• Dataset used: Kaggle Cardiovascular, diabetes, Kidney, Breast Cancer, malaria etc. dataset

• Project GitHub Link: https://github.com/ankiii07/Automate-Diagnosis

- **Usability:**
  - When patients not able to the hospital, then how patients able to access any doctor appointment & how doctor manage to give action according to patient health.
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  - We have observed that some patients find it challenging to describe their symptoms to doctors accurately.

- **Specify Features:**
  - Integration of clinical decision support with computer-based patient records could reduce medical errors, enhance patient safety.
  - It deceases unwanted practice variation and improve practice outcome which can help significantly improve the quality of clinical decisions.
  - Reduce disease identification time and start treatment expeditiously.
  - Reduce the cost of medical tests & by providing initial diagnostics in time that reduce huge amount of burden on patient's family
  - Chatbot.

- **Economic Sustainability:**
  - We first go personally to many hospitals for our product launching & later with some remote areas so that they use our application & get more & more benefits from it from anywhere.
  - At Initial Stage we just put more & more efforts to setup in market not on generating revenue.
  - it's not for generating revenue but later after this product get popular and provide more & more benefits to people, then we take charges for using this application which is affordable to our middle order people.

- **Environment Sustainability:**

- o The idea is much innovative and not implemented with such mixed technology so for which made the people to their comfort and so guide them to reach their desire.
- o Apart from this it is an initiative which has not been seen so far and it has Less development and maintenance cost and high profit values.
- o This Project is Environment Sustainable & much helpful to Remote areas public, rural area public & it does not cause any environmental damage.

Technology Used

- **Web Development**
VS Code, HTML, CSS, ReactJS, Django etc.

- **Machine Learning & Deep Learning**
Anaconda, Jupyter Notebook, EDA, Data Collection, Cleaning, Visualisation, NumPy, Pandas, Seaborn, SciPy, Matplotlib, Pandas, Sklearn Libraries, ML Algorithms

- **Augmented Reality**
Unity, Vuforia SDK, AR Core, A Frame, JDK, Augmented Reality integrated with Machine Learning

System Features

Admin Module:

- **LANGUAGE**
- **EMAIL AUTHENTICATION**
- **ADD DOCTOR**
- **ADD PATIENTS**
- **PAYMENT AUTHENTICATION**
- **HOSPITALS**
- **PATIENT ACTIVITY CHECK**
- **LOCATION-BASED RECOMMENDATION**

Path-Labs Module:

- **LAB HEAD**
- **FEED THE DATA**
- **ALL TEST CHECKOUT**
- **DOCTOR DETAILS ACCESS**
- **MORE RELIABLE TESTER**

- **PATIENT DETAILS ACCESS**
- **24 * 7 AVAILAVBLE**

Patients Module:

- **REGISTRATION**
- **LOGIN**
- **FORGOT PASSWORD**
- **EMAIL AUTHENTICATION**
- **PATIENT DETAILS**
- **APPOINTMENT BOOKING**
- **PAYMENT**
- **LAB TEST BOOKING**
- **LAB REPORT CHECK**

Doctors Module:

- **REGISTRATION**
- **LOGIN**
- **FORGOT PASSWORD**
- **EMAIL AUTHENTICATION**
- **VIEW PATIENT DETAILS**
- **APPOINTMENT CONFIRMATION**
- **APPLY FOR VERIFICATION**
- **GIVE PRESCRIPTION**
- **UPDATE HIS DETAILS**
- **FEES MANAGEMENT**
- **MANAGE PATIENT DETAILS**
- **VERIFY PATHLABS**
- **GIVE FEEDBACK**