
PROJECT NAME: SUSTAINABILITY & WELLNESS

Problem Definition:

A company XYZ has 100 employees working where it has provided each and every employee with an android support wearable technology to monitor each and every one's health. The company's major concern is the priority of the employees' health. Now that the company has executed the first half of their target by providing the employees with wearables. Now they have to fulfil the second half of their target which would be creating an application to monitor individually and to govern them as a group.

Project Objectives:

- Have an IoT device or Open API deployed on server to gather the datasets for the health impacting parameters like Body Temperature, Blood Pressure, Respiration, Glucose, Heart Rate, Oxygen Saturation, Electro Cardiogram etc.
- Any critical values in any one of the parameters is considered to be putting that particular person is not health conscious. So, for monitoring purposes applications are needed.
- Have a prediction model to find diseases from parameters so that precautions can be taken beforehand.

Proposed Plan of Work:

We are proposing a real-time sustainability and wellness system. This system works as a personalized assistant to the user. Since it's a real-time sustainability and wellness system, we give the health condition status and helps to find the medical records from the earlier list uploaded based on file name and provides fitness queries. We give the Email Automation that runs daily at the end of the day which collects the user's health information and provides their

condition of their health summary for each and every user. We give SMS/ Email upon major critical health warning such as reducing sugar level, asthma, etc.

Methodology:

Mobile Application:- (To manage single user health)

Screen 1:

UI to show the health parameters value as mentioned above. After getting the values from wearable to smartphone upload the values in your personal cloud like firebase for every 30 seconds.

Screen 2:

Option to add manual data with body text or document like medical records and view them whenever needed.

Web Application:- (To manage multiple users health)

Page 1:

Now from the database that contains all users records with their health information. Visualize their health information based on critical and normal values for each and every parameter mentioned above.

Page 2:

View the medical records of all the users based the username search criteria and list them wisely.

Technology:

In this project we will work on

- ML.
- HTML.
- CSS.
- NodeJS.
- React.
- Fire Base.
- Android. □ IOT.

ML-

Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention.

React –

React is an open-source, front end, JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

Fire Base –

Firestore is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps, grow their user base, and earn profit. It is built on Google's infrastructure. **Firestore** is categorized as a NoSQL database program, which stores data in JSON-like documents.

I.O.T –

The **Internet of Things (IoT)** refers to a system of interrelated, internet-connected objects that are able to collect and transfer data over a wireless network without human intervention.

The personal or business possibilities are endless.

Functional Specifications:-

- Chatbot that gives the health condition status and helps to find the medical records from the earlier list uploaded based on file name and provides fitness queries.
- Email Automation that runs daily at the end of the day which collects the user's health information and provides their condition of their health summary for each and every user. SMS/ Email upon major critical health warning such as reducing sugar level, asthma, etc.

Project Scope:

We are proposing a real-time sustainability and wellness system. This system works as a personalized assistant to the user. Since it's a real-time sustainability and wellness system, we give the health condition status and helps to find the medical records from the earlier list uploaded based on file name and provides fitness queries.

We will try to use the wearable technology as IoT device behind the process. As the rarest case if no wearable available, then can use the Open API Data where the abovementioned parameter values are retained in your own servers with random changing in Parameter values and carry on the above tasks.

We give SMS/ Email upon major critical health warning such as reducing sugar level, asthma, etc.

