VIRTUAL HEALTH ASSISTANCE SYSTEM

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ABSTRACT

In the fast-paced world, Pandemic like Covid-19, people must take care of themselves and others. Personal care has been ignored in the world and mainly in India. “Virtual Health Assistance System” tries to become a health assistant in these times when people can contract disease very easily. It is also found out that obesity has increased during the lockdown. This can be a potential threat in the future as “too much of anything is good for nothing”. This is also amplified by the fact that people have stopped being afraid of the Covid-19. This must be resolved immediately. People should lead a healthy and disease-free life. This can be controlled by a device that is used the most – Smartphone. People using smartphones can be notified about proper diet and hydration, proper hygiene and exercise and a new way to lead a healthy lifestyle.

I. INTRODUCTION

In this world, health is a major theme in leading a healthy lifestyle. In times of the Pandemic like Covid-19, people must take care of themselves and others. Personal care has been ignored in the world and mainly in India. “Virtual Health Assistance System” tries to become a health assistant in these times when people are leading the unhealthy and a lifestyle full of diseases. This can be a potential threat in the future. This is also amplified by the fact that people have stopped being afraid of the Covid-19. This must be resolved immediately. People should lead a healthy and disease-free life. This can be controlled by a device that is used the most – Smartphone. People using smartphones can be notified about proper diet and hydration, proper hygiene and exercise and a new way to lead a healthy lifestyle.

![Figure.1Global connected cars vs conventional cars](image-url)
II. LITERATURE SURVEY

Author [1] proposed a personalized healthcare program that utilizes cellphones to gather blood levels of individuals. The online module provides & displays process involves in smart phones to physicians or providers. Clinicians may use the technology to constantly measure and analyze a health diagnosis as well as receive suggestions to such individual.

Author [2] demonstrated a connected devices linked model that works on the Android system allowing ubiquitous supported life to persons with dementia. This device's architecture enables for information gathering, storing, and transfer via a private cloud.

Author [3] created new Mobile phone program enabling guided residential care in long term care facility. The programme analyzes and checks the participant's everyday lives and acts like a notification for such hospital's planned dates.

Author [4] provides a new private practice approach to meeting the emergency treatment demands of elderly individuals. The suggested method provides mixed information (speech and video) for analyze a personal safety.

Again for aged, crippled, old, and incapacitated, Bilal and Khaled [5] suggested an active suspension smart home. This program was made to allow persons with limited mobility to freely switch, handle, and check important household equipment.

III. PROPOSED SYSTEM

OBJECTIVE OF THE PROPOSED SYSTEM:

- To Assist users in leading a healthy life in the dire situations like Covid-19.
- Get to know basic details about corona and remedies for symptoms.
- Helplines to directly communicate to hospital facilities in case of emergency.
- Follow daily goals to lead a healthy lifestyle.
- Special Exercises to practice daily.

ARCHITECTURE OF THE PROPOSED SYSTEM:

This system consists of four modules:

1. The Symptom-Remedy Page
2. The Exercises Page
3. The Goals Page
4. The Report Page
The app also has a quarantine time built into it so that users know they have to stay at home for 14 days and take that as a challenge.

The System is split into two modules:

1. End User Functionality using React Native.
2. The remedies and other data using Firebase and other open-source API.

React Native:
Facebook, Inc. produced Web Applications, an accessible smart phone toolkit. It allows users to leverage React's architecture alongside open cv features to create mobile apps, Smart TVs, iphones, osx, watchos, Website, Windows, and UWP.

CROSS-PLATFORM:
Total use React's descriptive UI concept and Scripting to overlay old test scripts and communicate via .net Framework. This leaves open original mobile applications to innovative unique squads of engineers, and also allowing current indigenous teams working considerably more quickly.

FAST REFRESH:
As soon if you want to save, you'll be confident that the results. React enables writers to evolve in rapid speed thanks to Js. There would be no longer this need to allow for natively versions to complete. Do it all over again of saving, viewing, and saving again.

IMPLEMENTATION:
These operating concepts behind Reactjs generally strikingly similar with those of Reactive, with the exception that Javascript isn't using the Normandy Invasion for control the DOM. It operates also in meantime upon this destination node and connects only with code base through serialised information across an interrupted and cacheable bridging (that understands all Js provided mostly by designers).React components use React's basic Interface concept plus Js to envelop old test scripts and communicate using angular Js.

It also opens up original native apps to innovative unique companies of engineers, as well as allowing current mobile teams working considerably more quickly. Although the language of Ui style is close to that of Javascript, it should not utilise either HTML or CSS. Alternatively, traditional objects can manipulated via communications again from Js engine.React Native further lets people build text editor in programming language Like java or Kotlin for Mobile and Objective-C or Swift for iOS, giving itself more versatility.

Firebase:
Google's Firebase technology allows developers to create digital and social services. It started over as a stand-alone business in 2011. Google purchased the technology in 2014, and it has become a primary mobile software environment.Firebase is a suite for “building, improving, and growing any mobile,” and indeed the resources it creates opportunities a lot of such features the creators may typically ought to implement own or don't want to
since they'd better emphasis here on app support. Diagnostics, security, storage, management, file sharing, pushing notifications, etc are all part of all this. Such products are cloud-based and scalable with no work just on project's side.

**Figure 4 BLOCK DIAGRAM & DESCRIPTION**

A lot of mobile and device programmers that I have come across struggle with server-side programming. Firebase can really help bridge that gap and make it easier. It will be interesting to see developers use its offline features.

**Setting up a development Environment with React Native:**

- Install the latest version of Node.js and NPM.
- Then use the command to install expo:
  ```
  npm install -g expo-cli
  ```
- Create a new project:
  ```
  expo init VHAS
  ```
- cd VHAS
- expo start
- Install required dependencies using NPM install commands.
- Then Start creating Screens and pages.

**Setting up Firebase DB for fetching data**

**Creating a new project & SetRules to test mode to fetch data**
Virtual Health Assistant has gained much attention from healthcare area and researchers in recent years. The variety and heterogeneity of diagnostics implementation has been the major reason which makes it interested. This project presents a technique to analyse diagnostics from patients and process the diagnostics data using Raspberry Pi. Although the process occurs only the delivery of patient’s diagnostic data to user’s smartphone, Raspberry Pi is more suitable viewing the ability of Raspberry Pi that can be multitasking. We can include many more functionalities and features including music streaming, navigation, location tracking etc. to utilize the full potential of Raspberry pi. This project opens a wide range of possibilities when we connect a car to the internet by making it available to all only with minor modifications in the program code.
V. CONCLUSION

The Future of Humans is completely technology based and healthcare systems are a way to start innovation while connecting the technological and medical field. This App will help users to identify the symptoms, their remedies in their preferred way, and keep themselves fit physically and mentally. The result of using the app depend on the user who uses the app and how effectively they use it.

REFERENCES