Volume: 05 Issue: 06 | June - 2021 ISSN: 2582-3930

Development of website for creating Health Awareness amongst people

[1] Yogesh Panjabi, [2] Sagar, [3]Kunal Jain, [4]Shivani Gaba

Computer Science & Engineering Department,

Panipat Institute of Engineering and Technology, Panipat, India.

Abstract:- The system "Development of website for creating health awareness amongst people" is an effort to increase awareness of the health issues among people. The main objective of the project is to reduce health diseases and deaths by spreading awareness about health. This project can play an important role in facilitating knowledge to people in a fast and efficient way and can thus prevent most of the health -related complications. Our proposed healthcare system is based on Web app with ML which provide medical assistance to patients who reside in areas where transportability is limited and helps to save time of doctors and patients.

I. INTRODUCTION

Many medical applications already proposed and broadly used by health professionals and patients. The utilization of these applications is immensely helpful because it provides better communication between patients and doctors. The literature review of health awareness applications proclaim that applications focus on divergent area of healthcare such as patient care, communication of doctors with patients and many more. Our suggested system is based on a Web application with ML which provides medical assistance to patients who reside in areas where mobility is limited and help save the lots of time of patient and doctor. Users will be able to locate nearby hospitals according to the customized location and current location. Users will be able to book an appointment for the selected hospital. Users will be able to see the list of nearby pharmacies according to the customized location and current location. Our ML based Symptom Checker helps users to determine that from which disease they are suffering.

We also provide Chatbot functionality to users. The paper is arranged as follows; firstly we present the design of our system, why such system is required, technology used, accompanied by testing result and in the end a conclusion.

II. LITERATURE REVIEW

It is impractical to review all the available literatures that are linked to security and privacy in e-Health. Consequently, we accomplished in reviewing selected articles.

Grogan, J. (2006) demonstrates how Electronic Health Record (EHR) systems make it trouble-free for users to review the digital information in real-time and to take advantage of automated diagnostic tools that assist practitioners to rapidly pinpoint irregularities. When planning for disasters or

failures, those imposed with this responsibility need to think about those who electronically access medical histories and test results and the degree of efficiency, productivity and the quality of patient care they need to provide.

Nureni Ayofe Aeezz,Charles Van Der Vyyer(2019) examined in order to have efficient e-Health solution, it is important we include some of the recommended solutions proposed in any model for e-Health solution. The government and policy makers in all countries of the world should develop a comprehensive e-Health document framework to inspire and enable its acceptance.

Nizar Zarka et al.(2016) implemented a mobile healthcare system based on Android and Web applications. The system allows patients to make appointments with doctors and assigns reminders to take the prescribed medications and vaccinations. The results of testing the applications show a big saving of time and mobility of doctors and patients.

III. SYSTEM DESIGN

Our suggested healthcare system is based on Web application as it shows in Figure the Web application using the Web service where data can be transferred via Internet connection. Admin is in charge of updating all resources including hospital, patients etc.

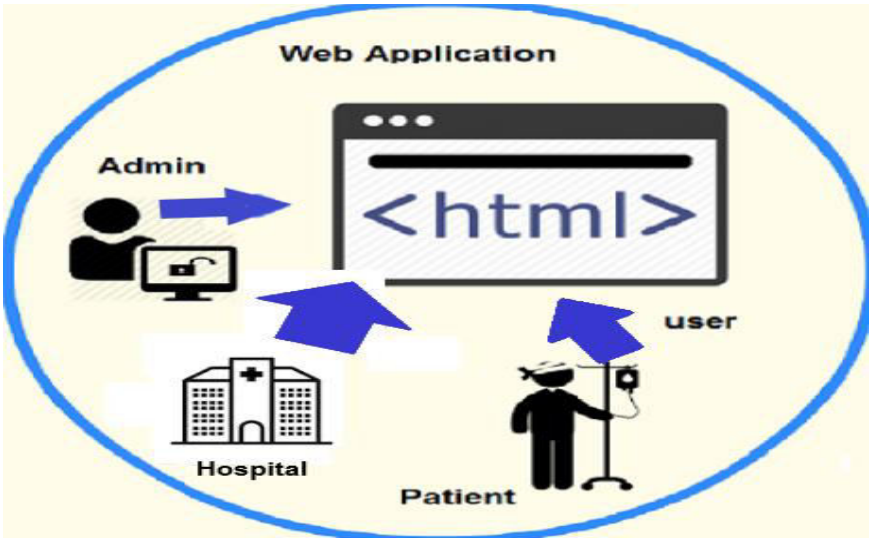

Figure1: System Design

The system works as follows: User/Patient can do Register or Login by using Email. Users will be able to locate nearby hospitals according to the customized location and current location. Users will be able to book an appointment for the selected hospital .User/Patient unable to book an appointment without login. Users will be able to see the list of nearby pharmacies according to the customized location and current location. Users will also be able to navigate and find the route to the selected hospital using Google Maps.

Our ML based Symptom Checker works only if User Logged in. Symptom Checker helps users to determine that from which disease they are suffering. We also provides Chatbot functionality to users.

IV. WHY SUCH SYSTEM REQUIRED

All who need effortless access to health associated information, on-time quality healthcare services and effective communication links with healthcare provider. This project can play a major role in facilitating knowledge to people in a rapid and efficient way and can thus prevent majority of the health-related complications.

In this modern world people are just busy in their hectic schedule and lost focus from their health .They want everything on a digital platform so this application will provide them a medium to keep a check on their health and easy access to health related information. They can be in touch with the healthcare providers. This system will help in prevention and wellness initiatives to protect and improve health for people.

V. MATERIALS AND METHODOLOGY

The Web application is implemented using MERN Stack, which is an open source web framework, constructed on the Model View Controller (MVC) to develop Websites. Figure 2 shows that the MVC divide the design into three layers; the database layer, the view layer and the control layer.

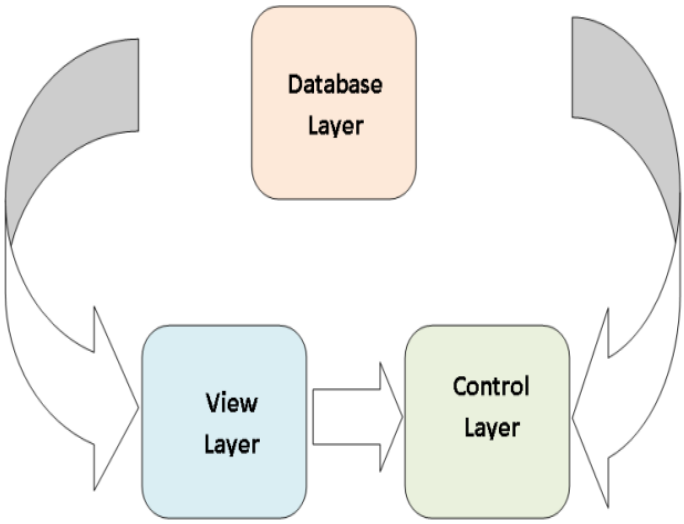

Figure 2: Model View Controller for Web Application

Figure 3 shows that how MERN Stack works .

MERN Stands for:

- **MongoDB**: A Non-SQL /Non Relational database used to reserve the application data.
- **ExpressJS**: A framework layered on top of NodeJS. It is used to build the backend of a site using NodeJS functions and structures.
- **ReactJS**: A library created by Facebook. It is used to build UI (User Interfaces) components that create the user interface of the single page web application. In ReactJS JSX is used which is similar to HTML.
- **NodeJS**: It is JavaScript runtime environment. NodeJS is used to run JavaScript code on a machine rather than in a browser.

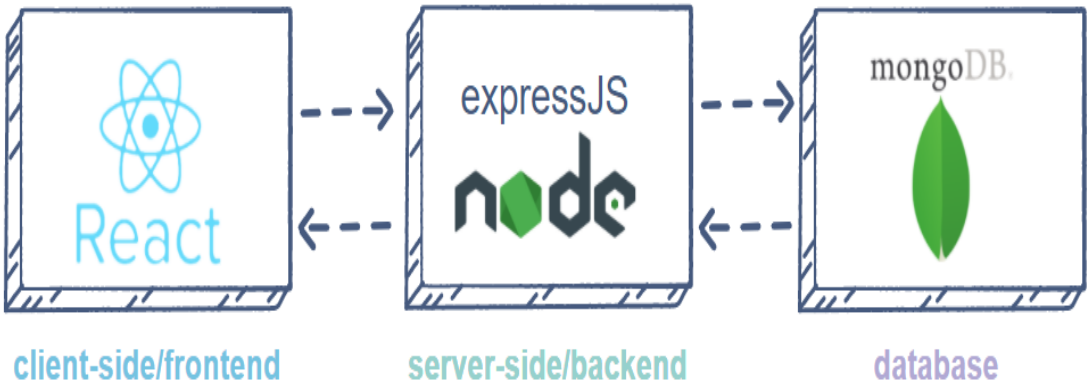

Figure 3: Working of MERN Stack

VI. TESTING OF THE WEB APPLICATION

The web application is tested on the local host. The applications are tested by the Developers.Figure 4, Figure 5 show the web application Home pages.

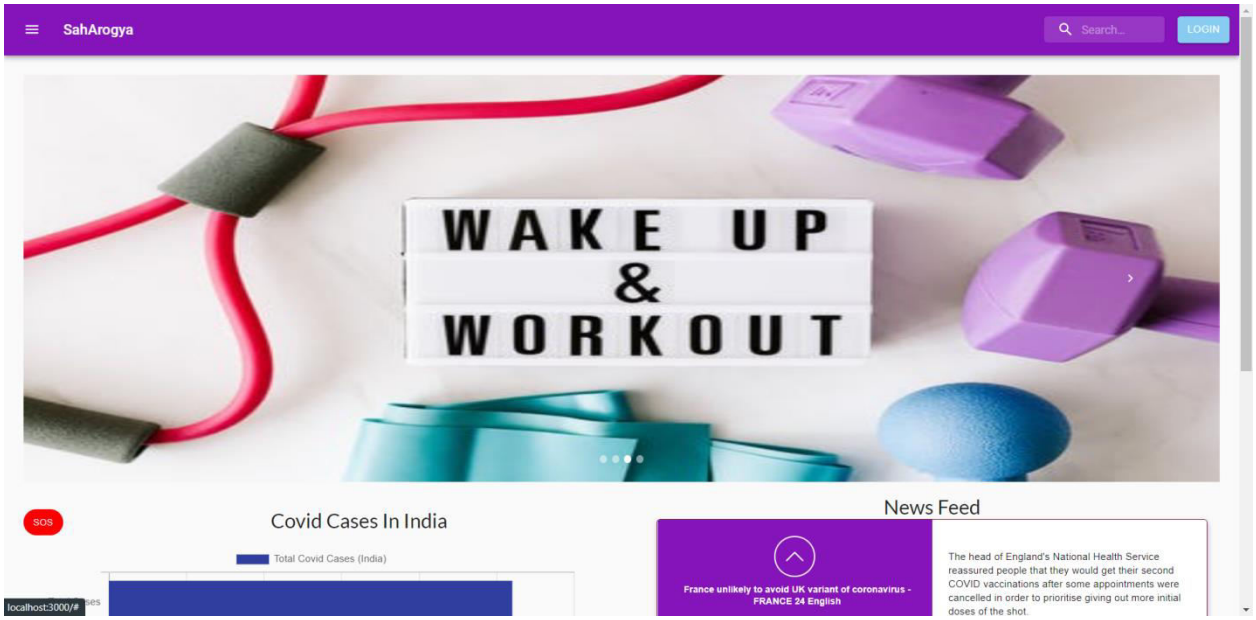

Figure 4: Home Page(1)

Figure 5: Home Page(2)

VII. CONCLUSION AND FUTURE SCOPE

A Web application based healthcare system is presented. The applications allow patients to make the appointment for the selected hospital. The system provides medical assistance to patients/users and save the time and transportability. The main objective of the project is to reduce health diseases and deaths by spreading awareness about health.

REFERENCES

[1] S. Brouwer, P. De Br, A. Montes Garcia, "*Framework for Adaptive Web-Based Systems",* Master Thesis, Eindhoven University of Technology, August 29, 2014.

[2] MEAN.io. (2015) MEAN— Full-Stack JavaScript Using MongoDB, Express, AngularJS, and Node.js. [Online].

[3]Pro MERN Stack: Full Stack Web App Development with Mongo, Express, React - By Vasan Subramanian

[4] Nureni Ayofe Aeezz,Charles Van Der Vyyer(2019),"Security and privacy issues in e-health cloud-based system: A comprehensive content analysis"

[5]Häyrinen, K., Saranto.K, & Nykänen, P. (2008), "Definition, structure, content, use and impacts of electronic health records: A review of the research literature", International Journal of Medical Informatics, 77(5):291–304.

[6] Mitchell, J. (1999) Tele health to e-health: "The unstoppable rise of e-health", Canberra, Australia: commonwealth Department of Communications, Information Technology and the Arts (DOCITA)

[7]Grogan, J. (2006), "*EHRs and information availability: are you at risk?*",Health management technology, 27(5):16.