**SMART HEALTH CONSULTATION**

A PROJECT REPORT

submitted by

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To

*The APJ Abdul Kalam Technological University*

*in partial fulfillment of the requirements for the award of the Degree*

of

*BACHELOR OF TECHNOLOGY*

*IN*

*COMPUTER SCIENCE AND ENGINEERING*



**Department of Computer Science and Engineering**

**Cochin College Of Engineering & Technology**

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**May 2019**

**DECLARATION**

We undersigned hereby declare that the project report “Smart Health Consultation”, submitted for partial fulfillment of the requirements for the award of degree of Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by us under supervision of **VIJESH K** **.** This submission represents our ideas in our own words and where ideas or words of others have been included, we have adequately and accurately cited and referenced the original sources. We also declare that we have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in our submission. We understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

Place Signature

Date Name of the student

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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**CERTIFICATE**

This is to certify that the report entitled **‘Smart Health Consultation’** submitted by “**BANEE ISHAQUE K”(LCCV15CS058), “MUFEEDA THASNI P”(CCV15CS026), “SAIKRISHNA K”(CCV15CS037) and “SAFA”(CCV15CS035),** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by them under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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| **ABSTRACT**    Nowadays consulting a doctor is a tiresome task, we need to find the respective doctor, book appointments and wait for consultation. This is more hectic in the case of emergencies especially when the patient is in an unknown area, finding a doctor is not easy. The patient’s appointment may be cancelled when doctor’s schedule is changed. In this case, time consumption in emergencies may cause harm to the patient. As a solution to this problem, we introduce a fast and easy to access Smart health consulting system. The smart health consulting system aims at maintaining patient health records and getting appointments from various doctors of related treatments. The system user must register as a member of this system and keep updating his/her medical history (by own as well as referring doctor).System predicts a doctor or a list of doctors specialized for respective treatments such as (skin specialist, ENT specialist, cardiologist etc.) at particular locations. The available schedules and timings of selected doctor is shown, where the patient can choose appropriate appointments. This project consists of a general user area, doctor’s area and a patient’s area. The general user area provided with help system, video tutorials and testimonials.  The doctor’s area consists of daily schedules (details of appointments per day) and leave management. Patient’s area consists of medical data management, registration for treatment and billing. Consulting a doctor is an obvious thing in our day-to-day life, but the availability of the doctor during the time of our requirement is unpredictable. In order to overcome the issue a proposal of android application is made, this smart health application enables users to get instant report on their health issues through an intelligent health care application online. This E-health application enables user to express their symptoms and issues. It then processes user’s issues and symptoms to check for various health issues that could be associated with the symptoms given by the user. If the application is unable to provide a particular solution then it urges the user to under-go tests like blood test, CITI scan accordingly.Data mining is the computer-based process of analysing enormous sets of data and then extracting the meaning of the data. Data mining tools can answer business questions that traditionally taken much time consuming to resolve. The huge amounts ofdata generated for prediction of disease are too complex and voluminous to be processed and analysed by traditional methods  Data mining provides the methodology and technology to transform these mounds of data into useful information for decision-making. By using data mining techniques it takes less time for the prediction of the disease with more accuracy. We survey different papers in which one or more algorithms of data mining used for the prediction of disease. Result from using neural networks is nearly 100% in one paper. So that the prediction by using data mining algorithm given efficient results. These large amounts of data are very important in the field of Data Mining to extract useful information and generate relationships amongst the attributes. The doctors and experts available are not in proportion with the population. In addition, neglect symptoms often. Disease diagnosis is a complex task, which requires much experience, and knowledge. In the health care industry, the data mining is mainly used for predicting the diseases from the datasets. The Data Mining techniques, namely Decision Trees, Naive Bayes disease database.  **Keywords:** Smart health, Android application, E-health, Intelligent health care application, Naive Bayes algorithm.  **C0NTENTS**  **ABSTRACT** | | | |
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**ABBREVIATIONS**

**DFD** Data Flow Diagram

**GUI** Graphical User Interface

**IDE** Integrated Development Environment

**NLP** Natural language processing

**RDBMS** Relational Database Management System

**SVM** Support Vector Machine

**WYSIWYG** What You See Is What You Get