

# Community Health Aider- Online Consultancy System

Dr.S.Thanga Ramya<sup>1</sup>, Y.B.Goutham Kumar<sup>2</sup>, S.Srivathsan<sup>3</sup>, S.Yeshwenth<sup>4</sup>

Associate Professor, Department of Information Technology, RMD Engineering College, Kavaraipattai, Tamil Nadu, India<sup>1</sup>

U.G. Student, Department of Information Technology, RMD Engineering College, Kavaraipattai, Tamil Nadu, India<sup>2,3,4</sup>

**ABSTRACT:** A web application that comes handy in the cases where the patient couldn't attend the doctor in personal. In this age of information and digitalization, everything is turning into online processes. The Community health aider is an end user support and online consultation project. Here we propose a system that connects patients to available doctors for online consultation and also allows doctors to give appointment in printable format. At times you may need just a small consultation for the problem you have, so you need to consult the doctor for that specific problem and to have the remedies. Community health aider will provide you the power of direct interaction between doctors of your choice as and when required for your small problems. It contains the Chat box that provides chatting feature with doctors, tell them their issues and discuss remedies. This app have to login page for the doctors and they can login and see the requests posted by the patients for their consultations. The system will record all the requests of the patients and gives to the doctors. The chat box has the feature to post the x-ray files, health history files, etc, which can be viewed by your referred doctors. This allows doctors to chat with patients and discuss their problems. There is also a separate system that allows the admin to post emergency details regarding blood donation, organ transplant requirement, etc.

**KEYWORDS:** Chat box, health history, organ transplant, online consultation, patients, web application.

## I. INTRODUCTION

The following development issues are considered while developing our web application.

1. Scalability- a site will have many users when it is attractive and many users will use the web application and it will have the big scale correspondingly.
2. Integration of data and business logic- the web application is good to have business and it will have the use of the access for the data and middle-tier work.
3. Manageability- web sites will have large demand and we should have the protocol to manage the websites to which the content has to be more interesting than other business systems.
4. Personalization- a user should have his personal way of customization it will be vital to keep the user using the web page easily. The user preferences will allow to view the information with the website, recent history of the transactions and keywords will help the user to use the app flawless and the feedback will improve the website.

## II. LITERATURE SURVEY

The Vision of this paper is establishing easy contact between patients and doctors by making use of an online system. It is an application that serves as a bridge for patients and users that require health advisory. This web application provides the advantage for both doctors and patients to get or offer services. The admin analyze and verify the doctors, approve them and provide ratings based on quality and feedbacks provided by users. This makes all the doctors available to users easily. Hence it makes the process in an easier manner.

This paper addresses these challenges through website. Using this one can, communicate with doctors directly. Hence using this one can help the patients.

### A. DEVELOPMENT OF JOIN HANDS APPLICATION

The patients may not consult with single doctor, so the access should be given to chat with multiple doctors. A separate login system is provided for doctors, so that we could establish a safe and sound communication between patients and doctors. The DFD will have the input-output process of the system which will help the software to have the data objects

the flow which is transformed by the elements to be processed and the data object will get out of the software. The arrows which are labeled represent the data objects and the circles is known as bubbles.

DFD is presented in a hierarchical fashion i.e. The system will have the representation of the first DFD model. DFD will subsequently have the diagram of all the levels to provide the details which are increasing in the level of exponential. The software engineer will help use to develop the DFD models and will give use the information and the domain which needs functional at the same period of time.

As the DFD is refined into greater levels of details, the analysts perform an implicit functional decomposition of the system. At the same time, the DFD refinement results in a corresponding refinement of the data as it moves through the process that embodies the applications. A context-level model of the DFD will have the external entities which is primary to get the information to be used to the system and which have the information to be produced and generated. The arrows which are in the labeled state will represent the hierarchy of the data object.

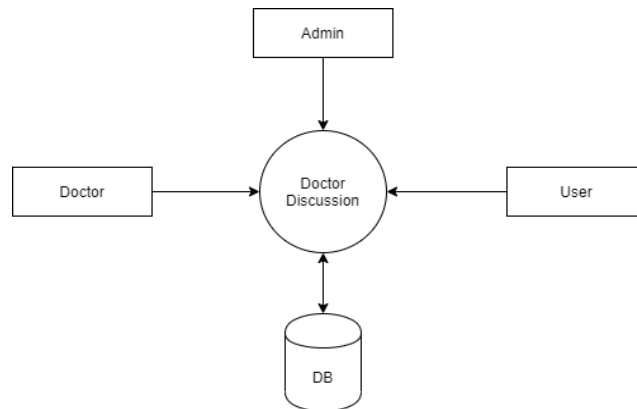


Figure 1: Level 0 DFD

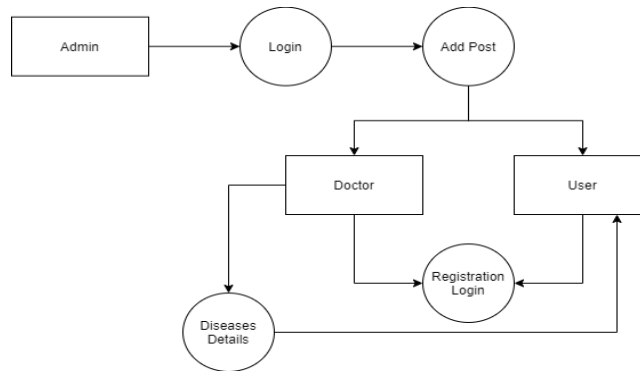


Figure 2: Level 1 DFD

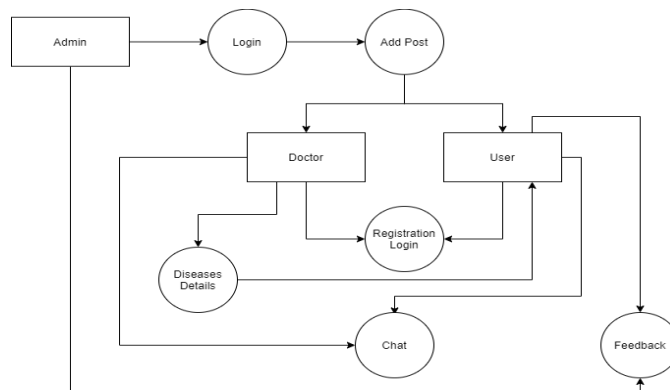


Figure 3: Level 2 DFD

Data flow will move in only one direction between the symbols. Before an update it may flow in both the directions between a data store and a process In DFD, If the same data comes from two or more different processes the data will be pooled or sink in a common location known as join. In order to avoid losses, this application provides the communication between doctor and patient. It requires a huge database, as it stores huge Volumes of data about all the patients, registered doctors and all the necessary information needed. This web application communicates with the database regarding the details over the internet.

**B. ALGORITHM BEHIND WEBSITE (APPLICATION):**

The PHP acts as a middleware and interacts with the database for each HTTP request. The PHP files contains the queries for requesting the database for data and sends back to the user.

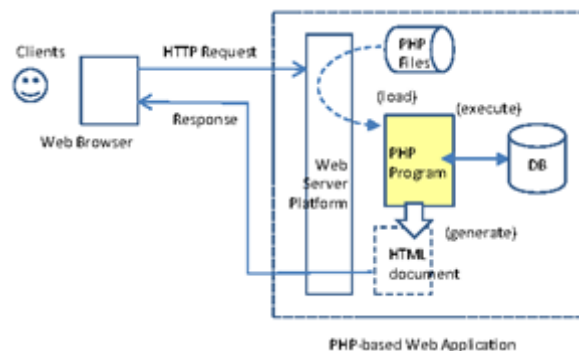


Figure 4: Algorithm working

**III. EXISTING SYSTEM**

Under normal Doctor System, you have to wait in a queue and then take the token of appointment from the doctor’s assistant and wait in the line and that line will move slowly and then you will have your chance to consult the doctor about health problems. As the information about your health problem is required and the you have to take the documents always will become a difficulty at times of the medical shop.

You have to be present physically at the doctor’s cabin. When the patients have serious medical condition like cancer or corona virus then it is important to have the extra nurses with that person always.

Under the manual system, the cash on delivery is the process always the patients will give the cash to the doctor it may be difficult sometime if the patient have only debit card or credit card and the treatment may get cancelled due to that circumstance.

**IV. PROPOSED SYSTEM**

The Community health aider is an end user support and online consultation project. Here we propose a system that connects patients to available doctors for online consultation and also allows doctors to give appointment in printable format. At times you may need just a small consultations for the problem you have, so you need to consult the doctor for that specific problem and to have the remedies.

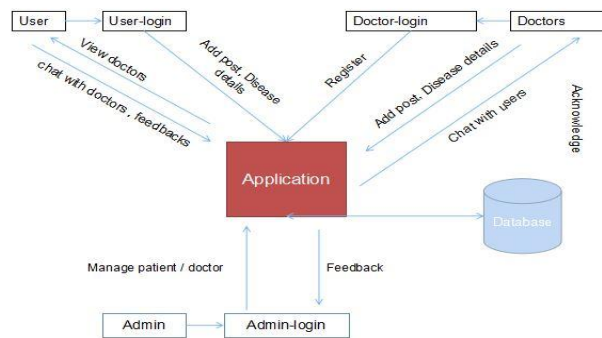
Community health aider will provide you the power of direct interaction between doctors of your choice as and when required for your small problems. Users can chat with the doctors, and discuss the health problems and the doctor can tell the right medicine for it. The doctors can also login to the web page and see the requirements of the patients. Then the web page will produce the recommendations in the page for the doctor to see them.

The x-rays files and the history of the health condition of a person can be posted etc. which can be viewed by your referred doctors. This gives option to doctors to chat about the patient’s health problems and give the remedy.



**A. ARCHITECTURE OF APPLICATION**

The Main functionality of this application is to display the various doctors available . It provides a platform for the patients to seek consultation from doctors online. The app provides the options for reading posts, articles and chatting with doctors



**Figure 5: Architecture of Application**

**B. MODULE DESCRIPTION**

**Registration & Login:**

In this module, there is a design for login and signup screen. Website used html to develop classical screens in our application and PHP for coding. The signup page contains email id or user name, mobile number, and password those kinds of details should be stored in database. Login screen contains username and password .when the user, login the app it should retrieve the data to the database and combine based on user input if its match user name, password to allow in the app otherwise it gave an alert and show a message to the user.

**Manage Doctor & Patient:**

Admin has permission to manage the list of registered doctors and patients. The registered doctor and patient contain details of their name, phone, address, email and such like this.

**Add Post:**

This module explains that admin has rights to post in any emergency announcements or information's for their registered doctors and patients. Which will be viewed to the doctors and patients after they login?

**Disease details:**

Disease details tell that doctor has responsibilities to give health tips to the registered user eg. Doctor can able to information of disease and prediction methods and also can able to say some possible solutions to their users. By using of that information user can use this.

**View Doctor:**

View Doctor Module tells us that users can view the doctor for their treatment and also user can able to interact with the doctor and can get help from that doctor.

**Chat:**

This chat module contains of chat application in this website. User can directly interact with the doctor and they can ask any doubts or question regarding their reports/general questions. Patient can allowed to chat to that particular doctor without any interference with respect to their privacy.

**Feedback :**

Admin has to check each and every feedback of the users. To know the defect that faced by any user and also has to take action if he receives any complaint of any other user.

## V. EXPERIMENTAL RESULTS



Figure 6: Home Page



Figure 7: User Registration Page

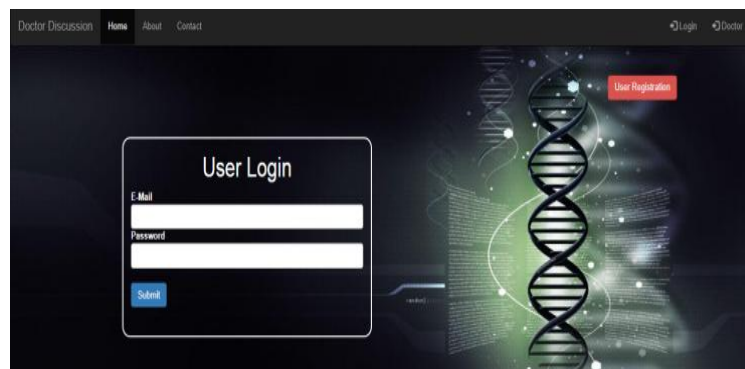


Figure 8: User/Patient Login Page

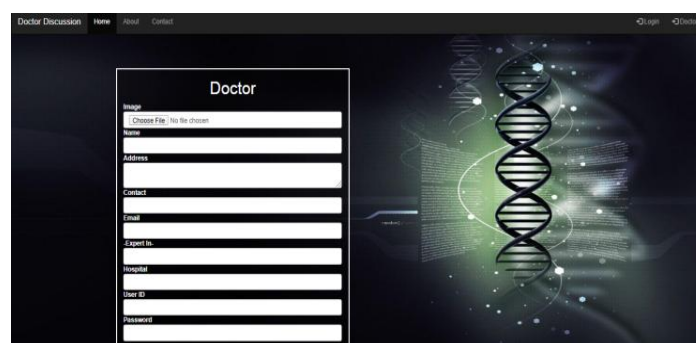


Figure 9: Doctor Login Page



Figure 10: User Profile Page

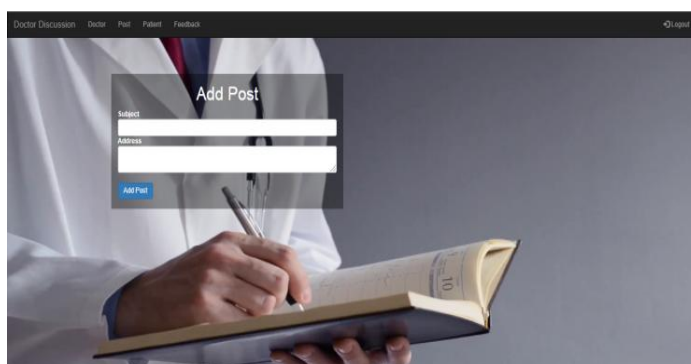


Figure 11: Admin Post

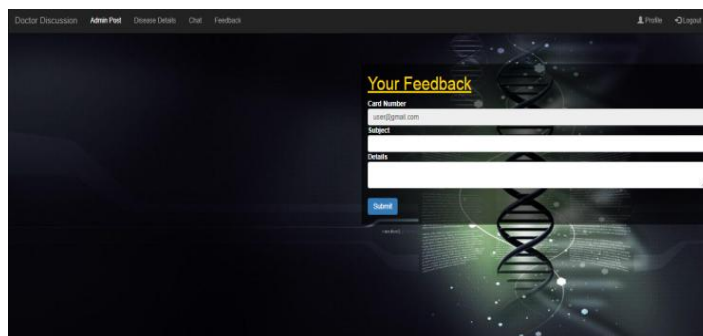


Figure 12: User Feedback

## VI. FUTURE ENHANCEMENT

In this paper, we proposed a new solution for privacy-preserving user profile matching with homomorphic encryption technique and multiple servers. Our solution allows a user to find out the matching users with the help of multiple servers without revealing the query and the user profiles. Security analyses have shown that the new protocol achieves user profile privacy and user query privacy. The experimental results have showed that the new protocol is practical and feasible. Our future work is to improve the performance of computing conditional gates by parallel computation.

## VII. CONCLUSION

The standard target of our endeavor is to design a web application for online consultation. The patients can't consult doctors during emergency situations and they may not need to consult for regular checkup. Thus our web application establishes a proper communication between doctors and patients and increases the patients options to approach an expert.



**REFERENCES**

- [1] "The Joy of PHP: A Beginner's Guide to Programming Interactive Web" by the author Alan Forbes.
- [2] "MySQL Explained: Your Step by Step Guide to Database Design" by the author Andrew Comeau.
- [3] "JDBC API tutorial and reference" by the authors Maydene Fisher, Jon Ellis, Jonathan Bruce.
- [4] "JDBC recipes a problem solution approach" by the author Mahmoud Parsian,
- [5] "PHP Object – Oriented Solutions" by the author David Powers.
- [6] "Build Your Own Database Driven Web Site Using PHP & MySQL" by the author Kevin Yank.
- [7] "Oracle9i JDBC programming" by the author Jason Price.
- [8] "SQL, the complete reference" by the author James R. Groff.
- [9] "Modern PHP: New Features and Good Practices" by the author Josh Lockhart.
- [10] "JDBC: Practical Guide for Java Programmers" by the author Gregory D. Speegle.