Complete Health Care Synchronize System

Miss. Tejaswini Sawant [1], Mr. Omkar Vankar [2], Mr. Sujit Sharma [3]

[1]Student, Dept. Information and Technology, A. C. Patil college of engineering, Maharashtra, India
[2]Student, Dept. Information and Technology, A. C. Patil college of engineering, Maharashtra, India
[3]Student, Dept. Information and Technology, A. C. Patil college of engineering, Maharashtra, India

---

Abstract - *It is web application which going to take care of health of person in unique way. Just like there are social profile, It is have health profile your all health related information with data & documents is always with you.*

Doctors information like Specialist, Year of experience, Amount of fees, and public reviews are their so people can find what they want. We also introduce the card system. Which going to work on cross platform. As soon as people goes registered on it, they will get their unique ID, Wallet for payment, Full document management system for their own and many more this all going to be linked with doctor, receptionist and all with their level of access privileges.

Key Words*: *WebApp, Health, Doctor Book, Health Profile, Receptionist, Hospital Management System (HMS), Multi Agent System (MAS).

1.INTRODUCTION

The purpose and idea behind this project is to simplify and make efficient existing system of The hospital management system with using latest technology. Almost every system has some drawbacks and weak point which are also present in this existing system. We identifies those weakness in system and take step to make it better.

Our aim to make efficient and convenient as possible as not for client also for all the prominence person like doctor, receptionist etc. Everyone connect to each other closely together.

If we talk about technology uses, We are using latest tech to make it better also able to cope with future development. So we using latest PHP version 7 for server side at backend development so we can make more secure and versatile. For making database we are using MySQL one of the best structured database also all the login password will be encrypt with MD5 hash algorithm. Because this project is come onto field of health, so it's security come to the first preference.

Motivation of this project is make a better and efficient system for all humanity good, because every good thing start when we are healthy.

2. LITERATURE SURVEY

1. A report by Zenon Chaczko, Christopher Chiu, Avtar Singh Kohli was published in 2010 named as "Smart Hospital Management System" aims to deliver an approach in architecting solutions which can be utilized as framework to address common issues in integration of enterprise level solutions. The methodologies discussed in TOGAF version 9 are utilized to demonstrate the feasibility of proposed solution

2. A report by Bake Koyuncu, Hakan Koyuncu was published in 2015 named as "Intelligent Hospital Management System (IHMS)" system was developed to assist the patient at the front desk of a hospital. The patient will be able to learn about the doctors, appointment times, relevant departments, laboratory tests and the specific medicine about his/her medical situation. System will provide an intelligent front desk information service for the patients at the hospital entrance.

3. A report by Nidhi Kushwaha, Shashank Sahu, Rajesh Kumar Tyagi was published in 2013 named as "Evolving Intelligent Agents for Hospital Management System" gives an approach to overcome this problem. In this paper, the software intelligent agents are proposed for hospital environment. Algorithms of each agent is also proposed and implemented. These agents are automated in gathering user requirements and automatically evolve over time after deployment of the software.

3. PROBLEM DEFINITION

How might we make system so efficient so all the connected people can do their best and communicate well in less time.

3.1 PROPOSED SYSTEM

All the data and codes will be reside on the server out of reach of intruder, login credential will be saved in database with after process hashing algorithm not as a plain text for making more secure.

We are introducing the card system, The all in one or we can call multipurpose card which will make things better. Just like we have ATM card, Aadhar card and so on.

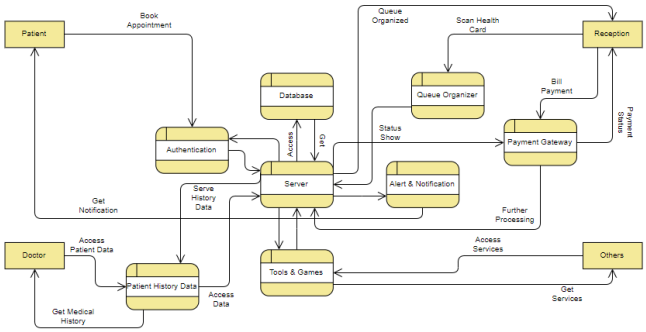

Figure: DFD Level 1

Fig -1: Block Diagram

4. DESIGN AND IMPLEMENTATION

Technology

The project mainly based on web based technology. There are two broad section, Front end and another one is Back end. Backend is coded with PHP v7 and above. Here we used structured database MySQL. Front end is developed with HTML, CSS, JavaScript, jQuery, Ajax and with some API.

HTML is a markup language and here it used for frontend structure, the appropriate tag is also important on SEO aspect, version 5 are used here. CSS it's stand for Cascading Style Sheet. It's used here for styling the front end, In styling here comes Layout, User Interface (UI), Colors and Orders of front end module. It's very important role to make user-friendly design. JavaScript also know as ES6 after 2015 release, It's used here for gives web pages interactive elements that engage a user. Used jQuery for same it's well known library of JavaScript, it's easy to implement.

AJAX stands for Asynchronous JavaScript and XML. AJAX is a technique for creating fast and dynamic web pages. AJAX allows web pages to be updated asynchronously by exchanging small amounts of data with the server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page. And this gives user feel of smooth interaction.

Application Programming Interface (API) is a software intermediary that allows two programmers to communicate with each other. An API is used every time we use an app like Facebook, send an instant message, or check the weather on our phone. It's allow programmer to take service from another programs. Here used for scan the barcode that is based on image processing mechanism.

5. RESULT ANALYSIS

After successful implementation of project, few graphical screenshot we taken to give a clear idea about the project. The following screenshots represents few aspects of projects.

Fig. 2 represents homepage of WebApp. Patient can go immediately to booking page from here.

Fig -2: Homepage

Fig. 3 is visual representation of profile page of patient where they can see and manage their all health related data.

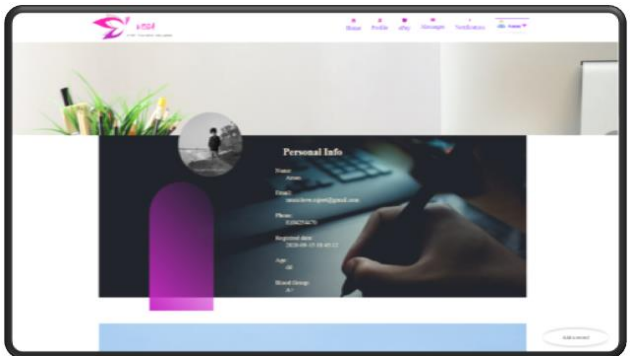

Fig -3: Patient Profile

Fig. 4 represents booking page, where patient can choose doctor through, their type of specific problem and then choose one based on review and year of experience.

Fig. -4: Booking Page

Fig. 5 This is patient history data, Patient can upload and manage their clinical data with ease. Patient can see, upload and download document and images.

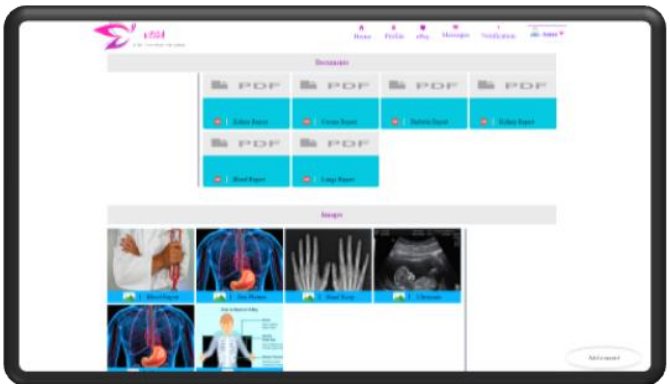

Fig. -5: Patient History

Fig. 6 represent Doctor panel where, they can scan the ID of patient and get all the patient data in one click, Also they can broadcast message to all the patient also message to any individual.

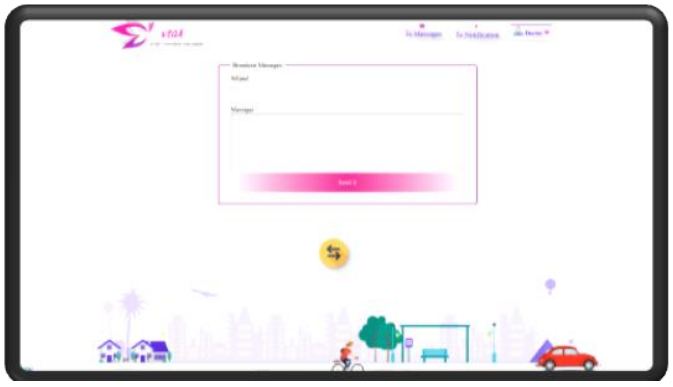

Fig. -6: Doctor Panel

Fig. 7 This is a payment User Interface which is connected to instamojo payment gateway at the backend, Here patient can recharge their ePay wallet, Check remaining balance, Can see previous transaction and more.

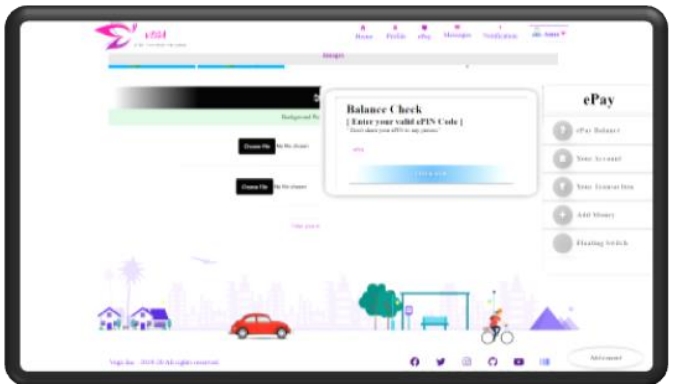

Fig. -7: Payment System

Fig. 8 is a screenshot of feedback sheet, which is taken from user to get feedback in order to improve further the web application.

Fig. -8: Feedback Sheet

6. CONCLUSION

This Proposed System helps to get better and efficient experience through a synchronized multi-node process. We take of every small things to make things easy as possible. We add all features & efforts by visualize our self as a client who going to use this system hoping to getting best out of it. The conclusion of all things is just contribute what we have to make better lifestyle to others peoples and more.

So, Because all the module are connected to each other it is time convenient also it is solution for clinical document management.

7. ACKNOWLEDGMENT

We thank our college Principal Dr. V. N. Pawar sir for guiding us for the development of the project. I would also like to thank HOD Mrs. Supriya P. Joshi for suggesting such a great project topic for departmental purpose. My sincere thanks to my Project Guide Mr. Sareen S. Deore for guidance, encouragement and co-operation throughout the completion of the project.

8. REFERENCES

[1] Michael Rosen, BorisLubinky, T. Smith Kevin, Marc J. Bachler, "Applied SOA Service-Oriented Architecture and Design Patterns", Wiley Publishing Inc., 2008.

[2] "Microsoft SQL Server 2005 Enterprise Edition", Microsoft Corporation, [online] Available: www.microsoft.com

[3] Russell. S and Norvig. P, 1995. Artificial Intelligence: A Modern Approach, Prentice-Hall, Inc, pp. 31-51.

[4] Henry Lieberman, "Intelligent Agent Software for Medicine", and Cindy Mason, Studies in Health Techno Inform, vol. 80, pp. 99-109, 2002.