Online Health Care Online Doctor Appointment Booking System

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Abstract—**The goal of this project is to create a web application that allows people to acquire prescriptions and recommendations from their preferred doctor without having to visit the hospital or schedule an appointment. Users of the 'Online E-Healthcare Online Doctor Appointment Booking System' do not need to visit a clinic to obtain prescriptions or medical advice. They simply become a registered member of our application and submit a prescription request to their favorite doctor. They must sign up with the registration number issued by the hospital at the time of their visit in order to become a member of our application. Guest users can search for information such as health recommendations, information about common medical conditions, and doctor availability in addition to registered members. Individual specialists and hospitals can also register using our service. As the administrator of this application, you have the ability to generate a variety of statistical reports. Any user who has logged in to our program me can sign out safely.**

Keywords—E- Healthcare, Medical Practice, Management System.

I. INTRODUCTION

Health-care via the internet The goal of this project is to create a web application that allows people to acquire prescriptions and recommendations from their preferred doctor without having to visit the hospital or schedule an appointment. Users of this 'E-Healthcare' system are not required to visit a clinic to obtain prescriptions or medical advice. They simply become a registered member of our application and submit a prescription request to their favourite doctor. They must sign up with the registration number issued by the hospital at the time of their visit in order to become a member of our application. Guest users can search for information such as health recommendations, information about common medical conditions, and doctor availability in addition to registered members. Individual specialists and hospitals can also register using our service. As the administrator of this application, you have the ability to generate a variety of statistical reports. Any user who has checked in to our app can sign out safely.

A. Existing System

Users who wish to consult a doctor can't do it in the current system because they don't have enough time. Users will have to wait for an appointment and will have to travel for treatment. They may misplace their medicines from time to time.

B. Disadvantages

1) Process that takes a long time
2) It is a costly investment.

C. Proposed system & It's Advantages

The suggested method eliminates the requirement for consumers to visit a clinic to obtain prescriptions or medical advice. They simply become a registered member of our application and submit a prescription request to their favorite doctor. They must sign up with the registration number issued by the hospital at the time of their visit in order to become a member of our application.

Advantages:
1) We can save time by doing so.
2) Users receive therapy within a reasonable amount of time.
3) We can receive the services at any moment.

II. SYSTEM ANANLYSIS

A. Study of the System

The interfaces that are available through a browser have been built to provide flexibility to the users. The top-level graphical user interfaces have been classified as

1) User interface for administrators.

2) The operational user interface, often known as the general user interface, is a user interface that.

The 'administration user interface' focuses on standardised data that is practically part of organisational activities and requires adequate identification for data collecting.

These interfaces assist administrators with all transactional states, such as data input, deletion, and date updating, as well as comprehensive data search capabilities. The 'operational or general user interface' assists system end users in transactions by providing access to current data and services. Ordinary users can also utilise the operational user interface to manage their own information in a customizable manner using the offered flexibilities.

B. Input & Output Representation

The design of the input is a component of the overall system design. The following is the key goal for the input design :

1) To develop a cost-effective input technique.

2) To attain the best level of precision feasible.

3) To ensure that the user understands and accepts the input.

C. Input Stages

The main phases of input are described below:

1) recording of data

2) transcribing of data

3) Conversion of data

4) Verification of data

5) Data management

6) Transmission of data

7) Validation of data

8) Corrections to the data

D. Output Design

In general are:

1) External outputs are those that are sent outside of the company.

2) Internal outputs are the user's primary interface with the computer and have a destination within the organisation. The primary purpose of computer outputs is to transmit the outcomes of processing to users. They're also employed to keep a permanent record of the results for future reference. The different kinds of outputs

3) Operational outputs created purely for the computer department's use.

Interface outputs, which allow the user to communicate with the system directly.

E. Output Media

The following step is to determine which medium is most appropriate for the output. The following are the most important factors to consider when selecting an output medium:

1) The device's applicability for a particular task.

2) The necessity of having a hard copy.

3) The response time required.

4) The location of the users

5) T The software and hardware that is currently available.

In light of the foregoing, the project's outputs will primarily fall into the category of internal outputs. The following are the key outputs specified in the requirement specification: The outputs required to be printed as well as questions that could be examined on a computer screen. The format for the output is drawn from the outputs, which are currently being received after manual processing, in consideration of these outputs. For hard copies, the conventional printer will be utilised as the output media.

III. SYSTEM DESIGN

Software design is the technical core of the software engineering process, and it applies to all development paradigms and application areas. For any engineered product or system, design is the initial step in the development process. The purpose of the designer is to create a model or representation of an entity that will be created later. System design is the first of three technical activities - design, code, and test - that are necessary to construct and verify software after system requirements have been identified and analyzed.

A. Class Diagram

Class Diagrams are used:
- Modeling issue domain concepts during requirements analysis.
- Modeling subsystems and interfaces during system design.
- During the object design process, to model classes.
- Name and model the system's notions.
- Specify database schemas that are logical.
- Represent the system's architecture.

A class represents a concept and encapsulates state (attributes) and behavior (operations).
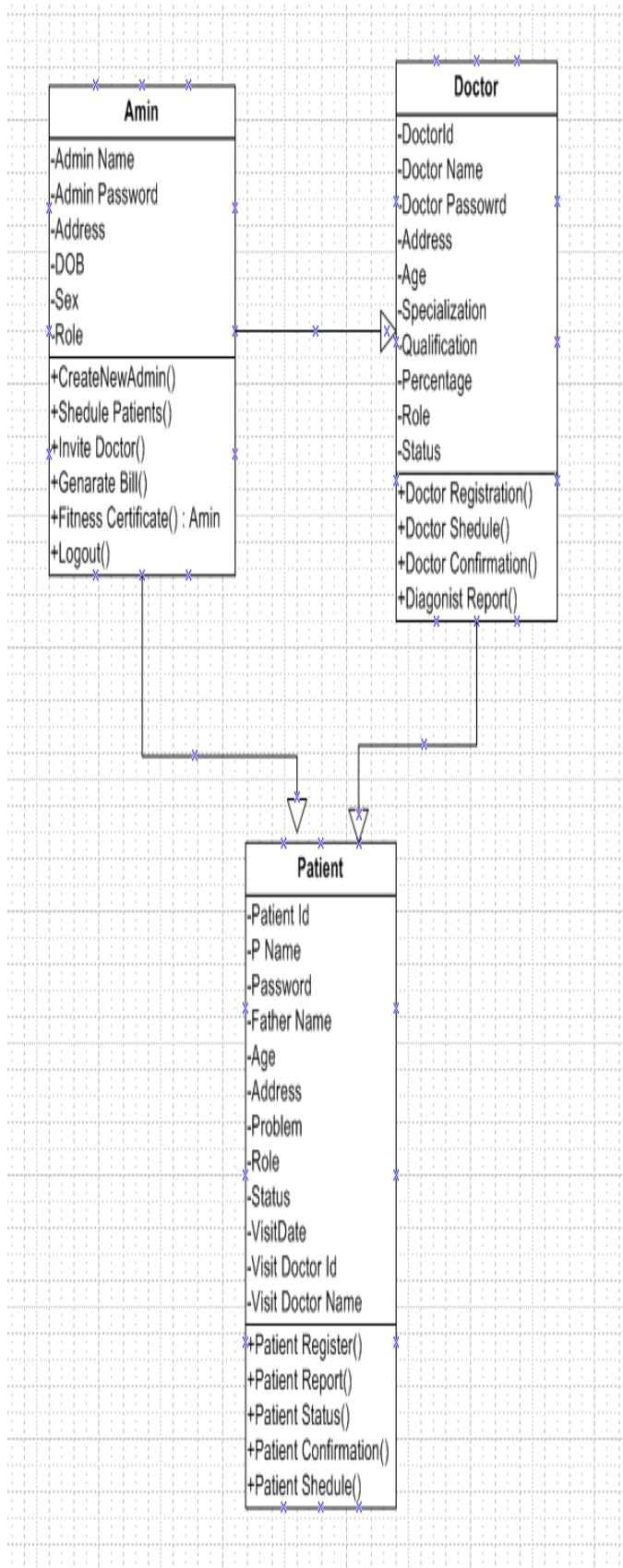
Fig. 1: Class Diagram

B. Architecture Flow

The architecture diagram below depicts the flow of requests from users to the database via servers. The total system is developed in three sections employing three layers: display layer, business logic layer, and data link layer in this instance. This project was built on the basis of a three-tire architecture. Equations.
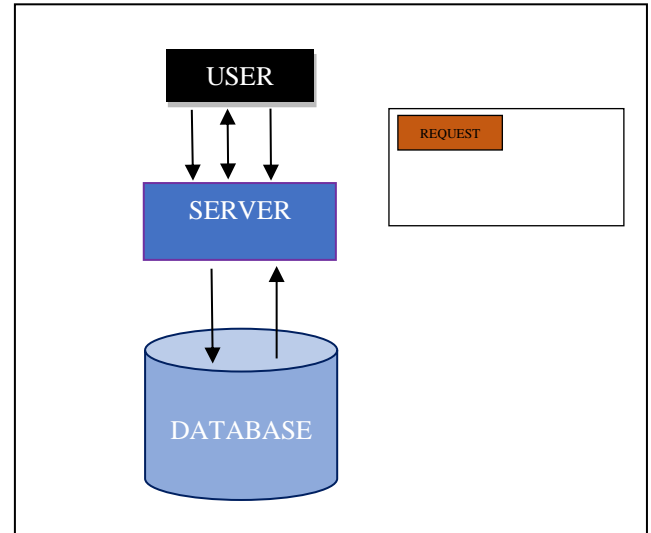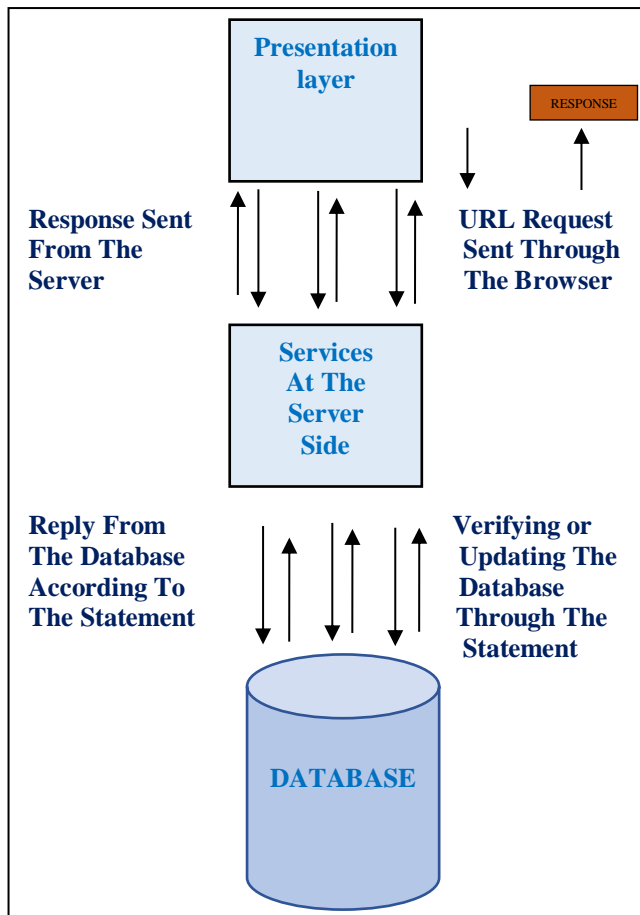

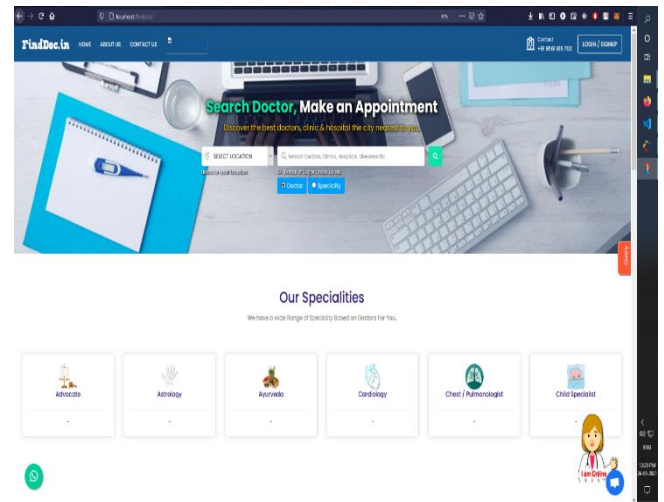Fig. 2: Architecture work Flow

C. URL Pattern

Fig.3: URL Pattern Flow

In an architecture diagram, the URL pattern depicts how requests flow from one layer to another and how responses are routed from other layers to the presentation layer via the server.
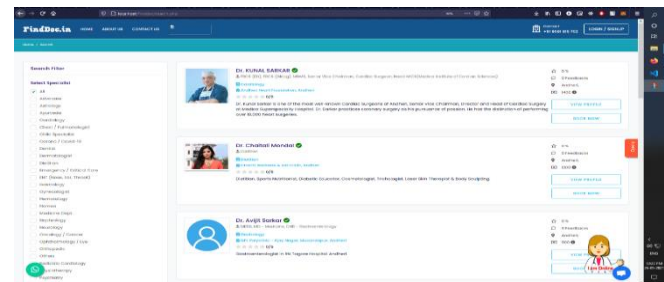
IV. WORKING

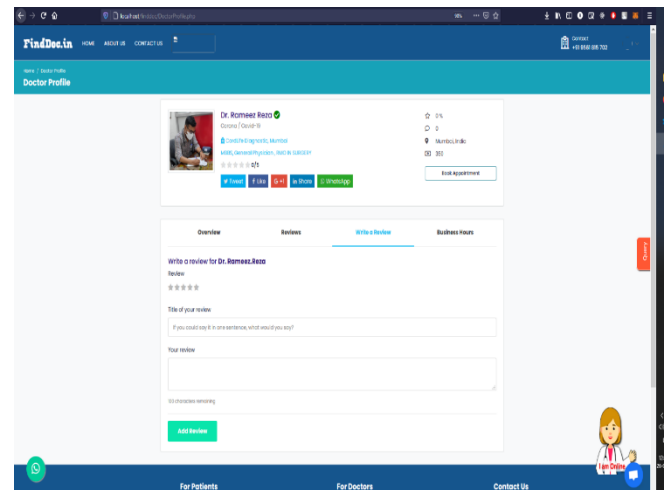The Working of E Healthcare system is described below using the screenshots of the working model.

A. Home Page : On this homepage we have a specialist list of different diseases we can see and search the doctor and there is also an option to sign in and sign out.
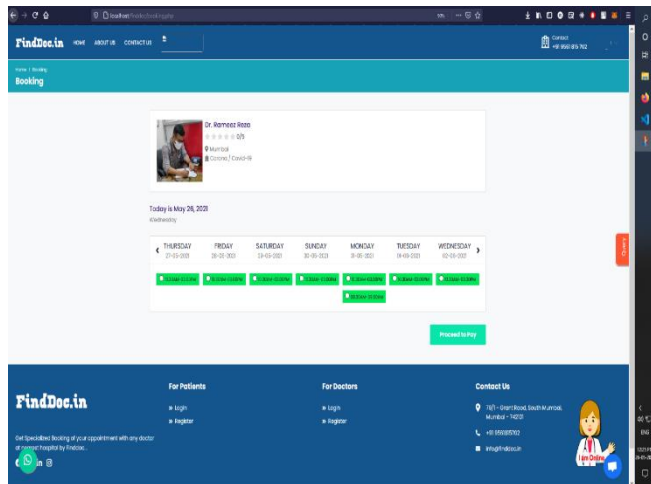

B. Doctor Search: There is a list of different doctors who can see the doctor you need and talk to them about your illnesses.
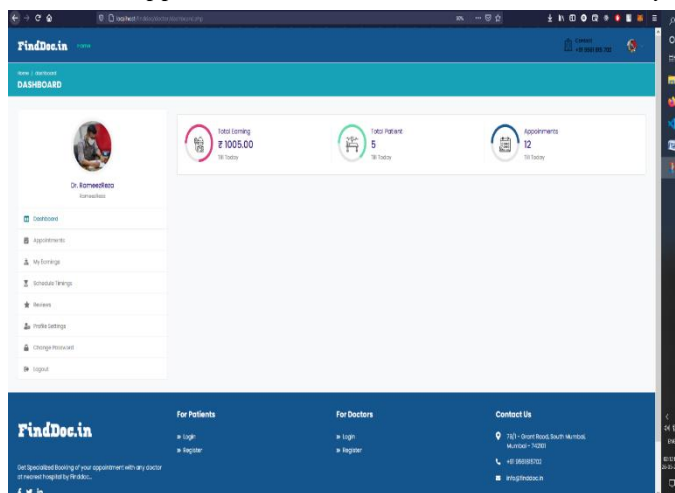

C. Doctor Profile Page: On this we can see the details of the doctor, we can see the contact number of the doctor and we can see which disease specialist he is
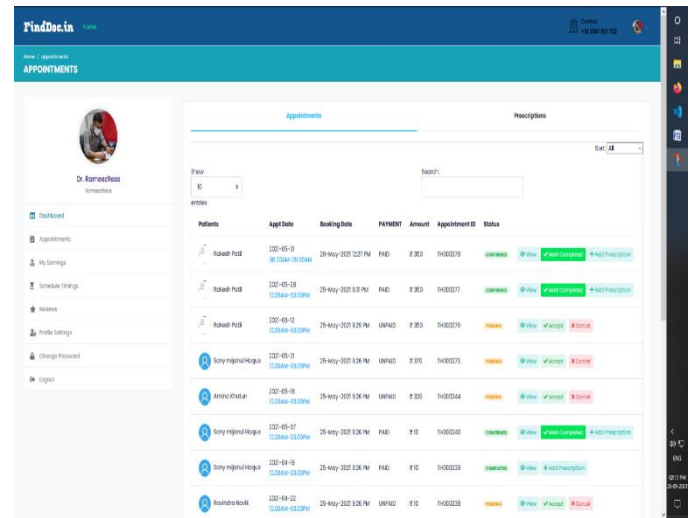
*D. Time Slot Selection Page:*The patient can see what the doctor's timing is. You can select the appointment accordingly and which days are available
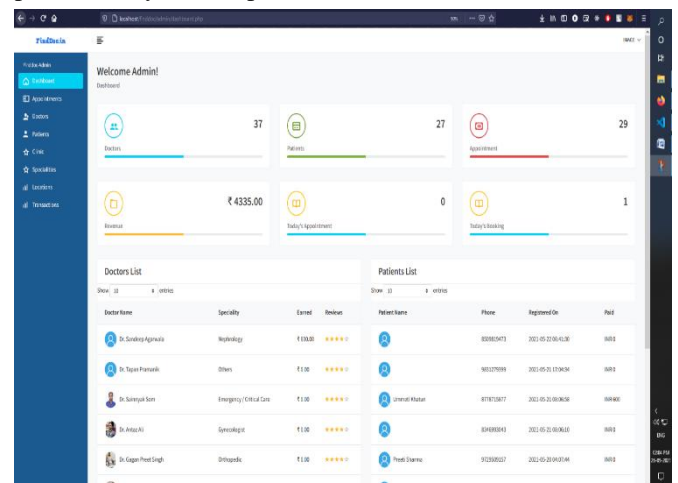

*E. Doctor Dashboard:*On the dashboard the doctor can see how many patients he has seen and how many patients have been appointed and how much he has earned daily

F. Doctor Appointment Manage: The doctor can manage the appointment, see which patient's meeting and which patient is left to be treated, and see when the patient has an appointment

G. Admin Dashboard: Admin can manage the patient record and how many patient appointment which doctor and how many earning in a the of all doctors and how many doctors present today in a hospital see that.

H. Admin Appointment:Admin dashboard is manage the doctor times and which time doctors which doctors available in the hospital and how many doctors are present today and see which patient treatment which doctor and patient paid the fees or not all see the admin

V. SYSTEM SECURITY

System security refers to the safeguarding of computer-based resources such as hardware, software, data, procedures, and people against unwanted access or natural disasters. System security can be broken down into four categories:

A. *Security*
B. *Integrity*
C. *Privacy*
D. *Confidentiality*
A. *DATA SECURITY*:
Is the protection of data from loss, disclosure, modification and destruction.

B. *SYSTEM INTEGRITY:*
Refers to the efficient operation of hardware and software, as well as adequate physical security and protection against external dangers such as eavesdropping and wiretapping.

C. *PRIVACY:*
Defines the user's or organization's rights to choose what information they want to share or accept from others, as well as how the organization can be safeguarded from undesired, unjust, or excessive distribution of information about it.

D. *CONFIDENTIALITY:*
Is a special status provided to sensitive data in a database in order to reduce the risk of privacy violation. It's a characteristic of information that defines its requirement for protection.

ACKNOWLEDGMENT

It's a health-care service that's available online. It's convenient, it gives you the most options, and it can all be done from the comfort of one's own cubicle. When professionals throughout the world spend 10-12 hours a day at work, the Online Health Care project saves time and effort.

REFERENCES

1. Anderson, J.G. (2007), "Social, ethical and legal barriers to e-health", International Journal of Medical Informatics, Vol. 76, pp. 480-3.
2. Bates, B.R., Romina, S., Ahmed, R. and Hopson, D. 431 No. 1, pp. 45-52.
3. Bodkin, C. and Miaoulis, G. (2007), "eHealth information quality and ethics issues: an exploratory study of consumer perceptions", International Journal of Pharmaceutical and Healthcare Marketing, Vol. 1 No. 1, pp. 27-42.
4. Campbell, R.J. (2001), "Consumer health, patient education, and the internet", The Internet Journal of E-Healthcare: Medical Practice Management System (IJSRD/Vol. 9/Issue 06/2021/022) All rights reserved by www.ijsrd.com 110 Health, Vol. 2 No. 2, available at: www.ispub.com/ostia/index. php?xmlFilePath ¼journals/ijh/vol2n2/consumer.xml
5. Dolan, G., Iredale, R., Williams, R. and Ameen, J. (2004), "Consumer use of the internet for health information: a survey of primary care patients", International Journal of Consumer Studies, Vol. 28 No. 2, pp. 147-53.
6. Eysenbach, G. (2001), "What is e-health?", Journal of Medical Internet Research, Vol. 3 No. 2, available at: www.jmir.org/2001/2/e20/
7. A Distributed e-Healthcare System Based on the Service Oriented Architecture Kart, F. Gengxin Miao Moser, L.E. Melliar-Smith, P.M. Dept. of Electr. & Comput. Eng., Univ. of California, Santa Barbara, CA.
8. A Service Oriented Architecture for a Health Research Data Network Rohan Baxter and Ross Sparks and Uma Srinivasan and Mark Cameron and Laurent Lefort.
9. E-healthcare: An analysis of key themes in research Avinandan Mukherjee, John McGinnis – International Journal of Pharmaceutical and Healthcare Marketing 2007. [10] Connolly, Thomas M, and Carolyn E Begg. Database Systems. Harlow, England: AddisonWesley, 2002. Print.
10. Eric Jamoom, Ph.D., M.P.H., M.S.; Paul Beatty, Ph.D.; Anita Bercovitz, Ph.D., M.P.H.; David Woodwell, M.P.H.; Kathleen Palso, M.A.; and Elizabeth Rechtsteiner, M.S. Physician Adoption of Electronic Health Record Systems: United States, 2011
11. Gerald Gianutsos, PhD, JD Identifying Factors That Cause Pharmacy Errors. Release Date: December 1, 2008. University of Connecticut School of Pharmacy.