NITTE EDUCATION TRUST | N.M.A.M. INSTITUTE OF TECHNOLOGY
(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)
Nitte – 574 110, Karnataka, India

REPORT ON FOUR WEEKS OF

INTERNSHIP-II

WEB DEVELOPMENT

Submitted to

NMAM INSTITUTE OF TECHNOLOGY, NITTE

(An Autonomous Institution under VTU, Belagavi)

In partial fulfillment of the requirements for the award of the

Degree of Bachelor of Engineering
in
Information Science & Engineering

By

POORVA S P
USN **4NM22IS407**

Under the guidance of

Y VISHNUVARGHAN
(Chief Director at Exposys Data Labs)

NITTE (Deemed to be University) | NMAM INSTITUTE OF TECHNOLOGY

CERTIFICATE

This is to certify that the "Internship II Report on "DOCTOR OPPOINTMENT SYSTEM" submitted by Ms. POORVA S P bearing USN 4NM22IS407 *of V Semester B.E, a bonafide student of NMAM Institute of Technology, Nitte, has undergone four weeks of internship during Sep 2023 to Oct 2023 fulfilling the partial requirements for the award of degree of Bachelor of Technology in* ***Information science and Engineering*** *at NMAM Institute of Technology, Nitte.*

Name and Signature of Mentor

Signature of HOD (Academics)

Exposys
Data Labs

Certificate of Internship

TO WHOM IT MAY CONCERN

This is to certify that **Ms. POORVA S P** has completed internship programme on **"Web Developer"** from 07.09.2023 to 06.10.2023.

She took keen interest in the work assigned and successfully completed it. During the period of internship we found her to be punctual, hardworking and inquisitive.

We wish her luck and success in all her future endeavours.

Y Vishnuvardhan

Chief Director

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Acknowledgement

I am presenting the entitled “EXPOSYS DATA LABs” with pleasure and contentment.

At every outset I express my gratitude to almighty lord for showering his grace and blessing upon me to complete this project.

The final output of this project required a lot of guidance from many people and we are extremely privileged to have got this all along the completion of this project. We were confused and did not know where to start or what to do. But our respected teacher showed us the way to do the project. All that we have done is only due to such supervision and assistance and we would not forget to thank them.

We would like to thank **Dr. NIRANJAN N. CHIPLUNKAR,** Principal for providing us with an invaluable learning experience during our internship. We respect and thank **Dr. I. R. MITHANTHAYA**, Dean (Academics) And Vice Principal for providing us with this Internship opportunity as it was a great learning experience for us. I wish to place on my record my deep sense of gratitude to my project guide, **Y VISHNUVARDHAN**, Chief Director at Exposys, who took keen interest in our project work by providing by all the necessary information for developing a good project. We are also grateful to this institution, N.M.A.M Institute of Technology, Nitte for giving this opportunity.

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ABSTRACT

The purpose of the project entitled as “DOCTOR APPOINTMENT SYSTEM”is to computerize the Front Office Management of Hospital to develop software which is user friendly simple, fast, and cost – effective. It deals with the collection of patient’s information, diagnosis details, etc. Traditionally, it was done manually. The main function of the system is register and store patient details and doctor details and retrieve these details as and when required, and also to manipulate these details meaningfully System input contains patient details, diagnosis details, while system output is to get these details on to the screen. The Doctor Appointment system can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The data are well protected for personal use and makes the data processing very fast.

PROJECT TITLE: WELL BEING
(DOCTOR APPOINTMENT SYSTEM)

CHAPTER 1

INTRODUCTION

1.1 PROJECT OVERVIEW

The Well being is an application designed to make an appointment to a doctor online. Patients can book an appointment with a doctor.

Admin/Doctor will manage appointments. Users have to make an appointment for their specific health issue and they get an appointment id.

Even they make payments through online banking/card.

1.2 OBJECTIVES

- To help people to make appointments online without going to hospital or making a call
- They can get treatments to any kind of health issues
- Integration with a payment gateway
- Organise your schedule better

1.3 INPUT AND OUTPUT

1.3.1 Input

- Users have to login/register by using their credentials.
- The user can select the treatment available in our treatments section.
- The users can feedback a doctor after the treatment.so that this helps to other users about the experience of the treatment.
- The doctors can view their appointments as well.

1.3.2 Output

- The user register/signup data is stored in the database.
- The user can get the PDF format appointment order with ID.

CHAPTER 2

LITERATURE SURVEY

2.1 PROJECT METHODOLOGY

2.1.1 SOFTWARE PROCESS MODEL

PROTOTYPE MODE

The prototyping model is a System Developed Methodology (SDM) within which a paradigm output (or an early approximation of a final system or product) is constructed, tested and then reworked. It is done till an approximate paradigm is achieved to help develop the entire system or product. This model works best in situations when all the details or requirements are not known well in advance. It is majorly a trial-and-error process which works in an iterative fashion.

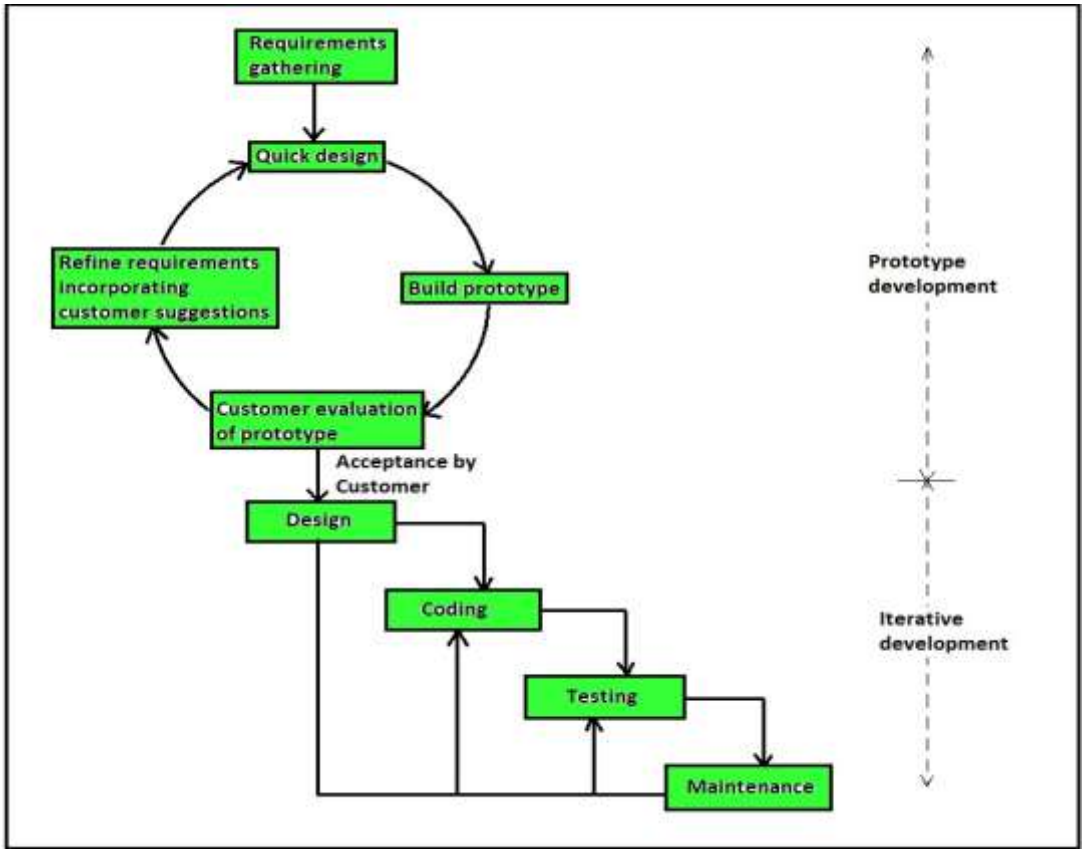


Fig: 2.1 PROTOTYPE MODEL

2.1.2 PHASE

A development process consists of various phases, each phase ending with a defined output. The main reason for having a phased process is that it breaks the

problem of developing software into successfully performing a set of phases, each handling a different concern of software development.

- **Requirement analysis**

Requirement analysis is done in order to understand the problem the software system is to solve.

His activity is to document the requirements in a software requirements specification Documents.

- **Design**

The purpose of the design phase is to plan a solution of the problem specified by the requirements document.

This phase is the first step in moving from the problem domain to the solution domain.

- **Build a prototype**

In this phase, the actual prototype is designed based on the information gathered from quick design.

It helps to find out the strength and weakness of the working model.

- **Refining prototype**

If there are any modifications we can change as per our requirements.

- **Coding**

The goal of the coding phase is to translate the design of the system into a code in a given programming language.

The goal of coding should be to reduce the testing and maintenance effort.

- **Testing**

Its basic function is to detect defects in the software.

The goal of the testing is to uncover requirement, design and coding errors in the program.

- **Maintenance**

Managing a process requires information upon which the management.

These issues relate to managing the development process of a project.

2.2 OVERVIEW OF TOOLS/TECHNOLOGY USED

2.2.1 Front end:

HTML:

HTML is used to create and save web documents. HTML and initialisation of Hypertext Mark-up Language, is the predominant mark-up language for web pages. It provides a means to describe the structure of the text-based information in a document by denoting certain text as headings, paragraphs, lists, and so on and to supplement that text with interactive forms, embedded images and other objects. HTML is written in the form of labels (known as tags), surrounded by angle brackets.HTML can also describe to some degree, appearance and semantics of a document and include embedded scripting language code which can affect the behaviour of web browsers and other HTML processors.

CSS:

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language such as HTML.CSS is a cornerstone technology of the World Wide Web, alongside HTML and Java Script.

CSS is designed to enable the separation of presentation and content including layout, colour and fonts. This separation can improve content accessibility, provide more flexibility and control in specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate ".CSS" file to be cached to improve the page load speed between the pages that share the file and its formatting.

Bootstrap:

Bootstrapping is a self-starting process that is supposed to proceed without external input and is a responsive and mobile friendly site.

JavaScript:

It's a programming language commonly used with web browsers. JavaScript is a script- based programming language that was developed by Netscape Communication Corporation. JavaScript was originally called as live script and renamed as JavaScript to indicate its relationship with java. JavaScript supports the development of both client and server components of web applications. On the client side it can be used to write programs that are executed by a web browser within the context of a web page. On the server side it can be used to write Web server programs that can process information submitted by a web browser and then update the browsers display accordingly.

2.2.2 BACK END:

Php and MYSQL:

The term PHP is an acronym for *PHP: Hypertext Preprocessor*. PHP is a server-side scripting language designed specifically for web development. It is open-source which means it is free to download and use. It is very simple to learn and use. The files have the extension ".php".

Rasmus Lerdorf inspired the first versionof PHP and participated in the later versions. It is an interpreted language and it does not require a compiler.

- PHP code is executed on the server.
- It can be integrated with many databases such as Oracle, Microsoft SQL Server, MySQL, PostgreSQL, Sybase, and Informix.
- It is powerful to hold a content management system like WordPress and can be used to control user access.
- It supports main protocols like HTTP Basic, HTTP Digest, IMAP, FTP, and others.
- Websites like www.facebook.com and www.yahoo.com are also built on PHP.
- One of the main reasons behind this is that PHP can be easily embedded in HTML files and HTML codes can also be written in a PHP file.
- The thing that differentiates PHP from the client-side language like HTML is that PHP codes are executed on the server whereas HTML codes are directly rendered on the browser. PHP codes are first executed on the server and then the result is returned to the browser.
- The only information that the client or browser knows is the result returned after executing the PHP script on the server and not the actual PHP codes present in the PHP file. Also, PHP files can support other client-side scripting languages like CSS and JavaScript.

MySQL:

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold vast amounts of information in a corporate network. In particular, a relational database is a digital store collecting data and organising it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database.

CHAPTER 3

SOFTWARE REQUIREMENT SPECIFICATION

3.1 PURPOSE OF THE SYSTEM

The Well being is a self-service tool for patients to book appointments. It facilitates the overall treatments available. Just like event management, hotel room management doctor appointment systems help to contour the appointment process and effectively manage appointments.

The Wellbeing is an innovative tool that helps to make an appointment to any doctor from any device and on any place anywhere.

3.2 SCOPE OF THE SYSTEM

- Need for an online appointment system is growing day by day and it is essential for the healthcare industry.
- Patients can make an appointment to any doctor from anyplace, anywhere.
- Patients can schedule on their own terms.
- Make payment online.

3.3 SYSTEM REQUIREMENTS

- **Hardware requirements:**

processor	: Intel i3 7th gen
Hard Disk	: 8GB
Monitor	:14’ colour monitor
Mouse	: Optical mouse or Touchpad.

- **Software requirements:**

Operating system	: Windows 7 and above or Linux
Coding languages	: HTML, CSS, JavaScript and Php
Database	: MySQL
Server	: XAMPP
Tools used	: VS code

CHAPTER 4

SYSTEM DESIGN

4.1 INPUT DESIGN

Input is the raw data process to produce output. The quality of system input determines the quality of system output. It should serve a specific purpose effectively such as storing, recording and retrieving the information.

It ensures proper completion with accuracy. It should be easy to fill and straight forward. It should focus on the user's attention, consistency, and simplicity.

Input:

- **User Input:** Name, Email, Password, Confirm Password, Gender, Phone Number.
- **Doctor Input:** Name, Password
- **Admin Input:** Id, Password.

4.2 OUTPUT DESIGN

Completion of a successful project. When all planned tasks and activities are accomplished and project deliverables are produced.

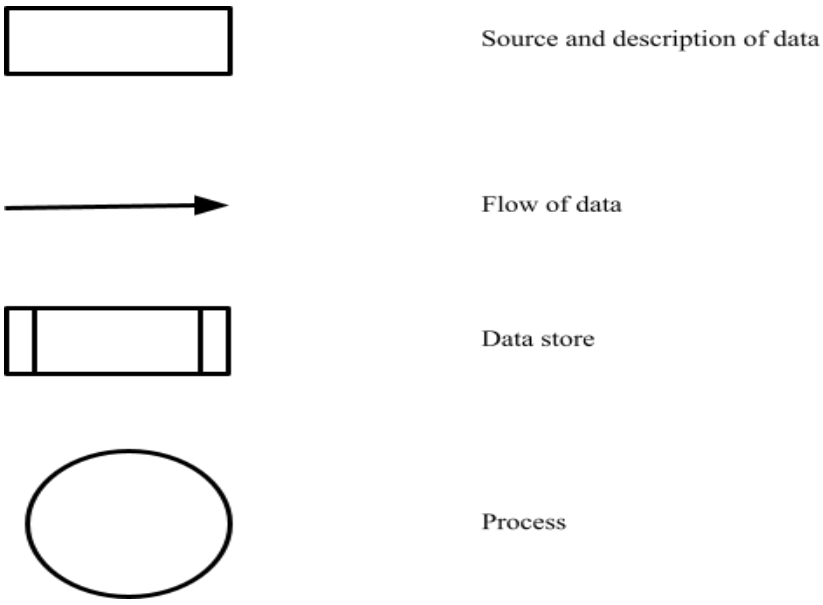
The term output refers to any particular services, results or products that are generated as a result of a particular project related process.

- **Output:** Available sessions, appointments.

4.3 DATA FLOW DIAGRAM

Data-flow diagrams is a graphical representation of the system that aims to be accessible to computer specialist and non-specialist users alike. The models enable software engineers, customers and users to work together effectively during the analysis and specification of requirements. Although this means that our customers are required to understand the modelling techniques and constructs, in data-flow modelling only a limited set of constructs are used, and the rules applied are designed to be simple and easy to follow. These same rules and constructs apply to all data-flow diagrams (i.e., for each of the different software process activities in which DFDs can be used).

DFD symbols:



Level 0 DFD for Admin:

Fig 4.3.1.1 Level 0 DFD of Admin

Level 1 DFD for Admin:

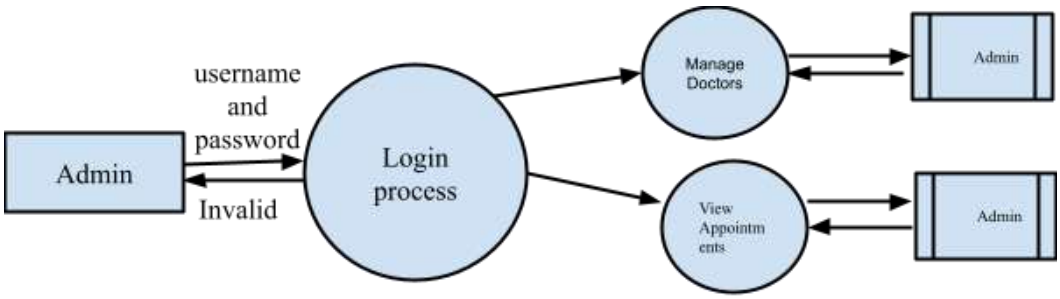


Fig 4.3.1.2 Level 1 DFD Admin

Level 0 DFD for Users:

Fig 4.3.2.1 Level 0 DFD of Users

Level 1 DFD for Users:

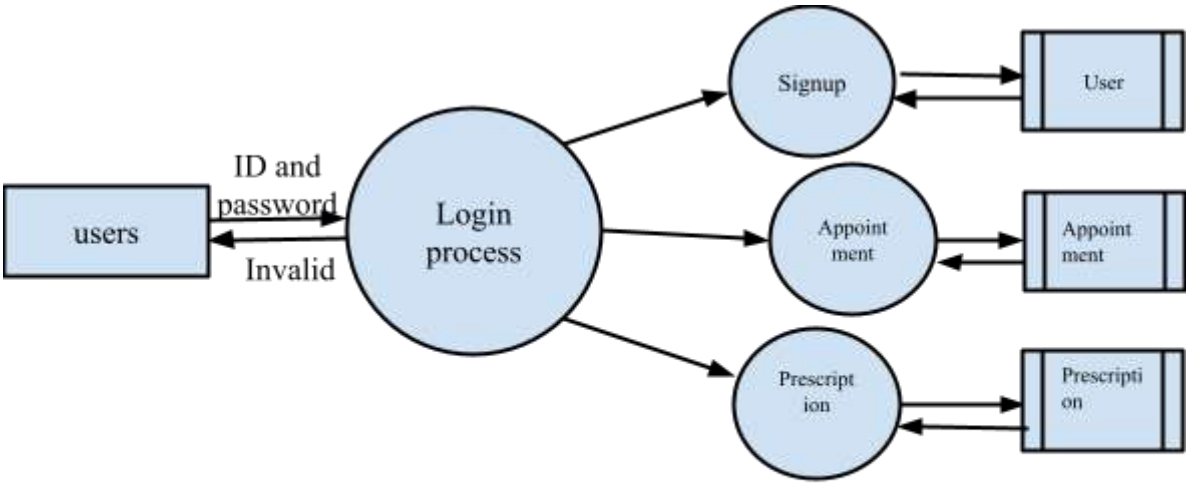


Fig 4.3.2.2 Level 1 DFD for Users

Level 0 DFD for Doctors:

Fig 4.3.3.1 Level 0 DFD of Doctors

Level 1 DFD for Doctors:

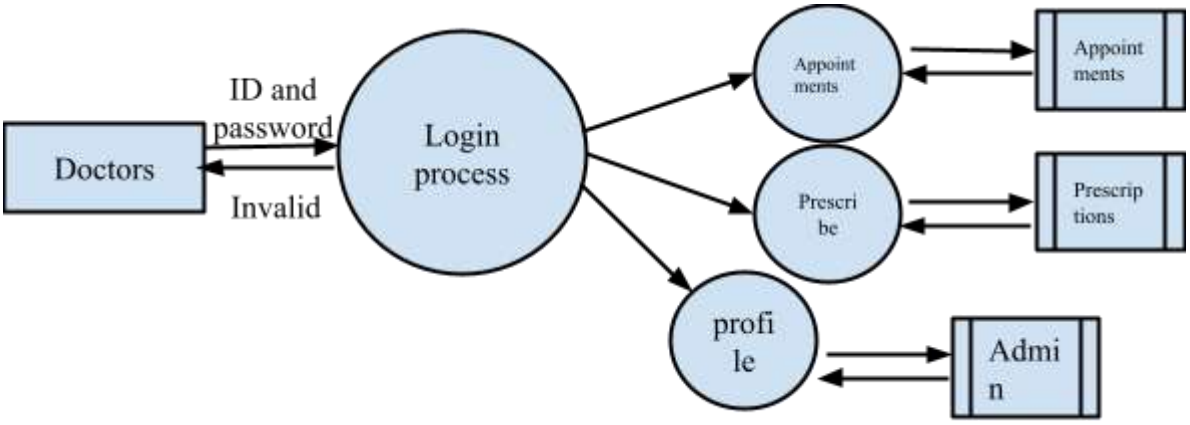


Fig 4.3.3.2 Level 1 DFD For Doctors

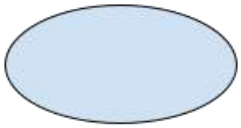
4.4 ER DIAGRAM NOTATIONS:

An Entity Relationship Diagram, also known as an Entity Relationship model, is a Graphical representation that depicts relationships among people, objects, concepts or events within an information technology system.

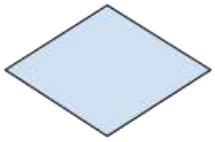
ER Diagrams are created based on 3 basic concepts: Entities, Attributes and Relationships.

Symbols:

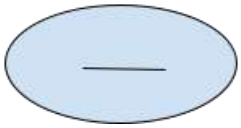
Represent entities.



Defines attributes



Represents relationship



Represents primary key

Represent entities.

Defines attributes

ER Diagram

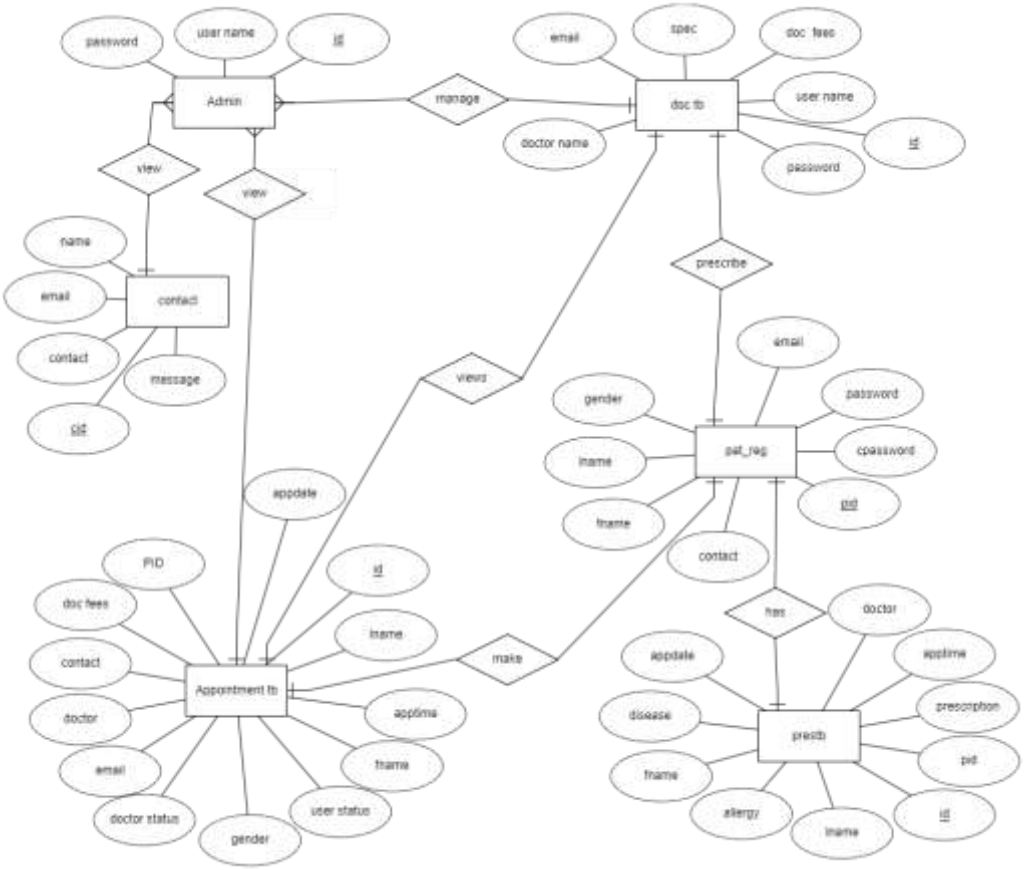


Fig 4.4.1.1 ER Diagram

4.5 USE CASE DIAGRAM

Use case diagram for users:

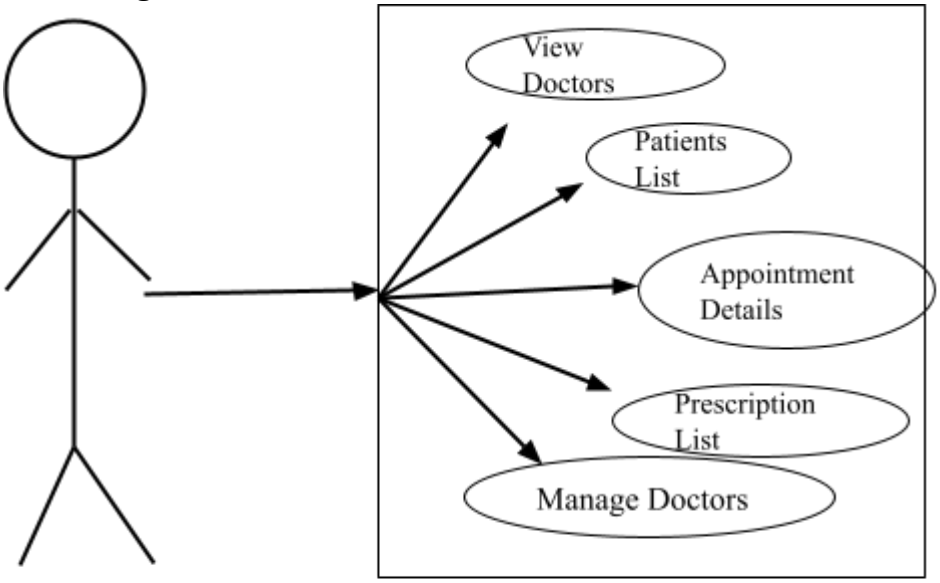


Fig 4.5.3 use case diagram for Admin

User case diagram for Doctors:

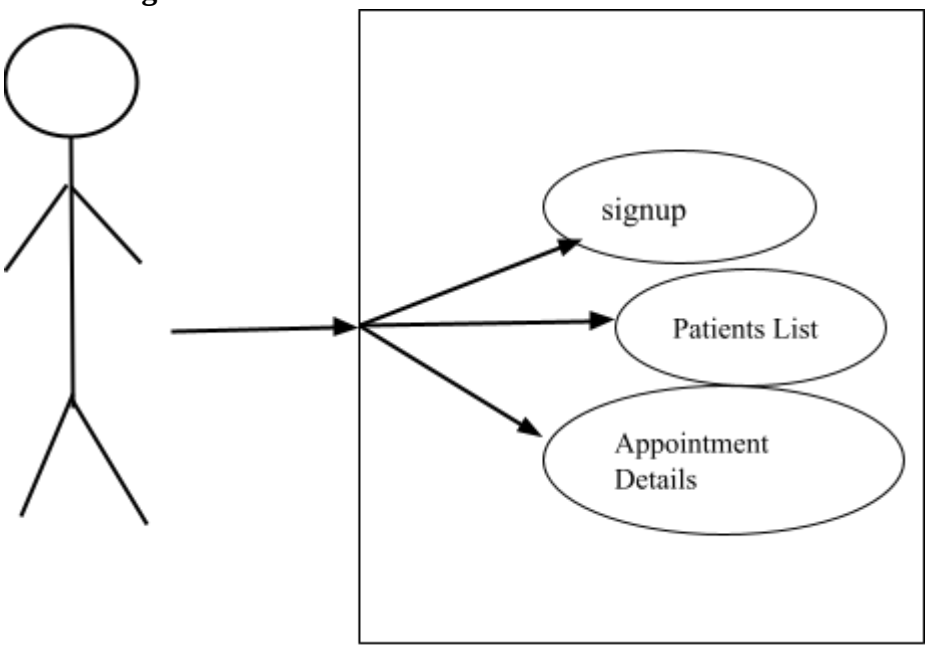


Fig 4.5.2 user case diagram for Doctors

User case diagram for Admin:

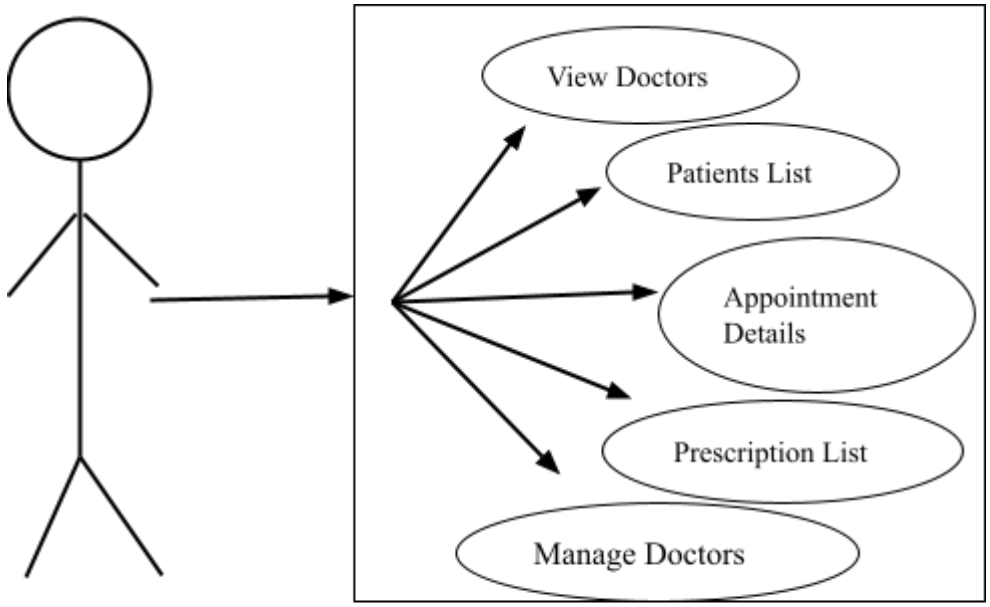


Fig 4.5.3 use case diagram for Admin

4.6 DATABASE DESIGN:

Admin:

Name	Data Type	Size	Null	Constraints	Default
aemail	VARCHAR	255	NO	Primary Key	None
apassword	VARCHAR	255	YES	None	Null

Appointment:

Name	Data Type	Size	Null	Constraints	Default
appid	INTEGER	11	NO	Primary Key	None
pid	INTEGER	10	YES	NONE	Null
apponum	INTEGER	3	YES	NONE	Null
schedleid	INTEGER	10	YES	NONE	Null
appodate	DATE		YES	NONE	Null

Doctor:

Name	Data Type	Size	Null	Constraints	Default
docid	INTEGER	11	NO	PRIMARY KEY	None
Docemail	VARCHAR	255	YES	None	Null

Docname	VARCHAR	255	YES	None	Null
Docpassword	VARCHAR	255	YES	None	Null
Docnic	VARCHAR	15	YES	None	Null
Doctel	VARCHAR	15	YES	None	Null
specialties	INTEGER	2	YES	None	Null

Patient:

Name	Data Type	Size	Null	Constraints	Default
Pid	INTEGER	11	NO	PRIMARY KEY	None
Pemail	VARCHAR	255	YES	None	Null
Pname	VARCHAR	255	YES	None	Null
Ppassword	VARCHAR	255	YES	None	Null
Paddress	VARCHAR	255	YES	None	Null
Pnic	VARCHAR	15	YES	None	Null
Pdob	DATE		YES	None	Null
ptel	VARCHAR	15	YES	None	Null

Schedule:

Name	Type	Size	Null	Constraints	Default
scheduleid	INTEGER	11	NO	Primary Key	None
Docid	VARCHAR	255	YES	Foreign key	Null
Title	VARCHAR	255	YES	None	Null
Scheduledate	DATE		YES	None	Null
Scheduletime	TIME		YES	None	Null
nop	INTEGER	4	YES	None	Null

Specialities:

Name	Type	Size	Null	Constraints	Default
id	INTEGER	2	NO	Primary Key	None
sname	VARCHAR	50	YES	Null	Null

Webuser:

Name	Type	Size	Null	Constraints	Default
email	VARCHAR	255	NO	Primary Key	None
usertype	CHAR	1	YES	Null	Null

CHAPTER5

IMPLEMENTATION

The Wellbeing is a web based android application, which revolutionises the way of appointment with the doctor. Patients can make appointments and consult doctors according to their problem. The application provides a flexible and easy to use environment on desktop as well as Portable devices like smartphones or tablets for the users to achieve their respective objective.

5.1 SYSTEM MODULE

In the Wellbeing project, we use backend PHP and MySQL for databases. It has 3 modules,

● Admin module ● Patient module ● Doctor module

1. Admin Module
    - Login
    - Manage Doctors
    - View Doctors
    - Patients List
    - Appointment Details
    - Queries
2. Patient Module
    - Login / Signup
    - Schedule Appointment
    - My Appointments
    - View Sessions
3. Doctor Module
    - Login
    - View Appointments
    - Make Sessions

5.2 MODULE DESCRIPTION

5.2.1 Admin Module:

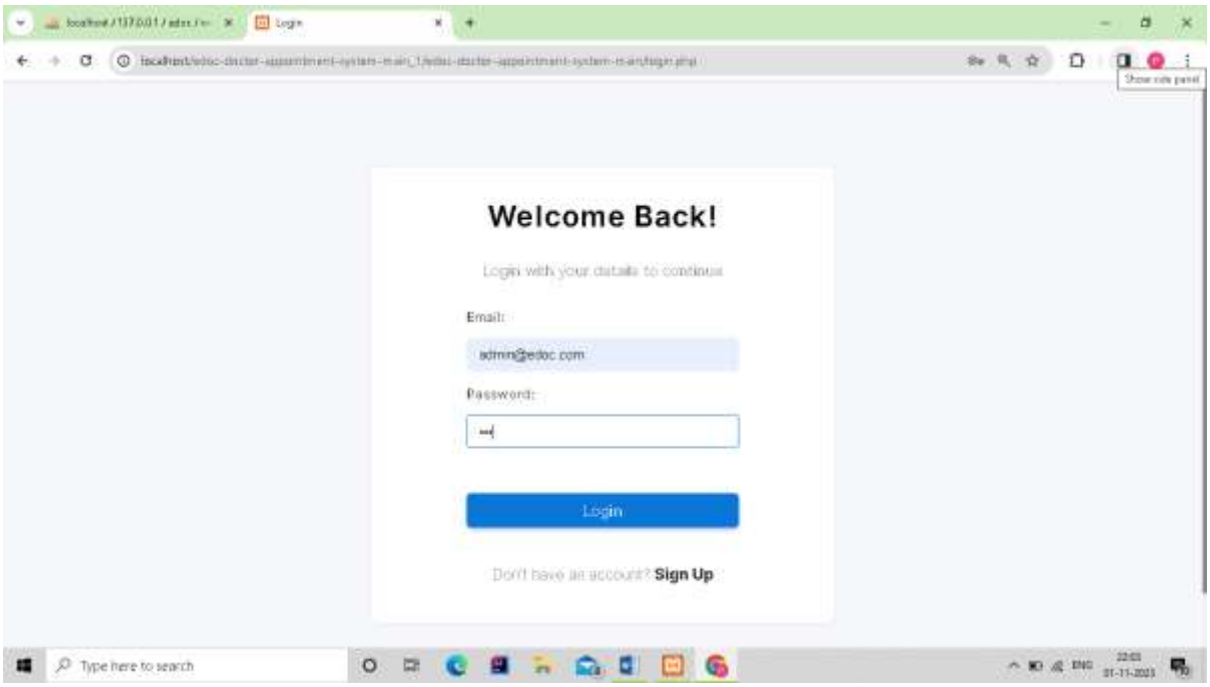


Fig 8.1: Admin Login

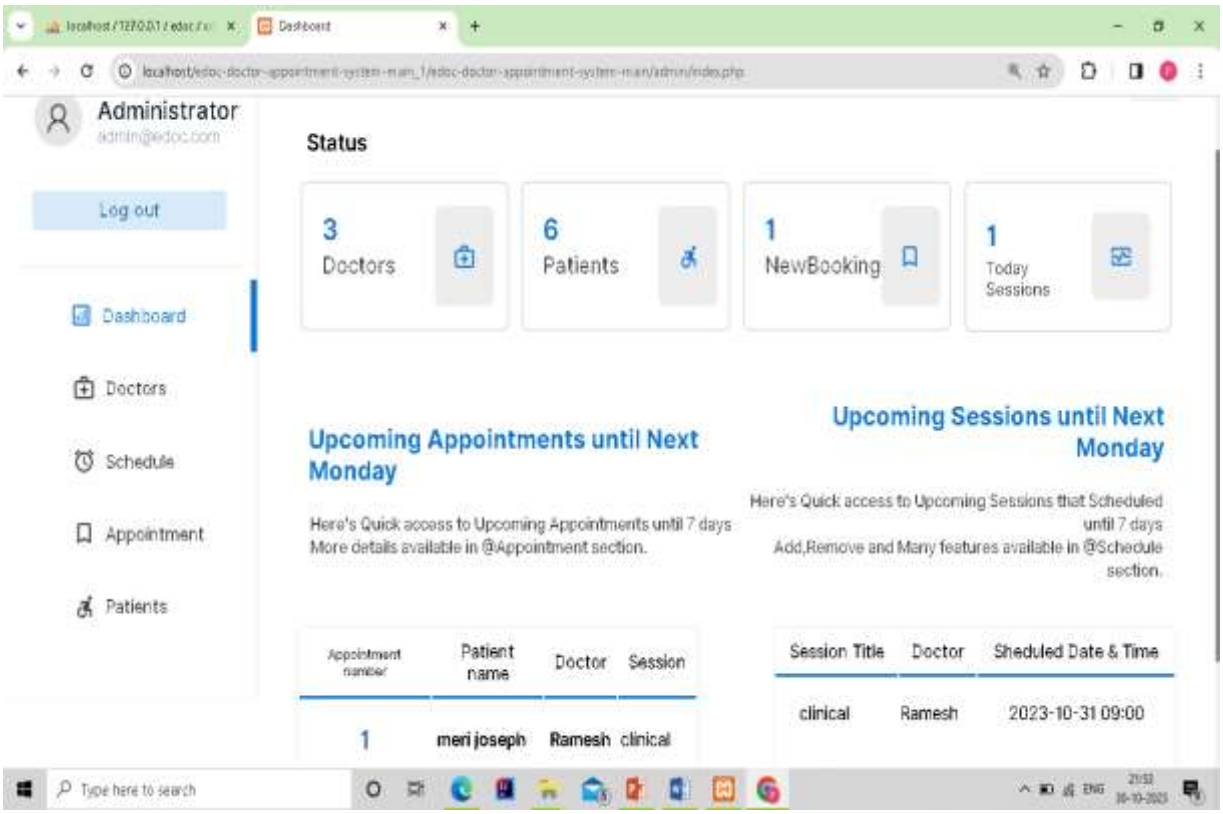


Fig 8.2: Admin Dashboard

- **Login:**

Login simply means to validate the admin like authenticating the admin. It means the admin is identified and authenticated to access the Wellbeing database to manage doctors and view patients list and prescription lists.

- **Manage Doctors:**

Admin can add, remove doctors and their specialisation and their appointment fees.

- **View Doctors:**

Admin can view doctors those who are in the appointment service to the patients the list of fully active doctors list available in this admin panel.

- **Patients List:**

The full list of prescribed and to be prescribed patients lists are available in this module.

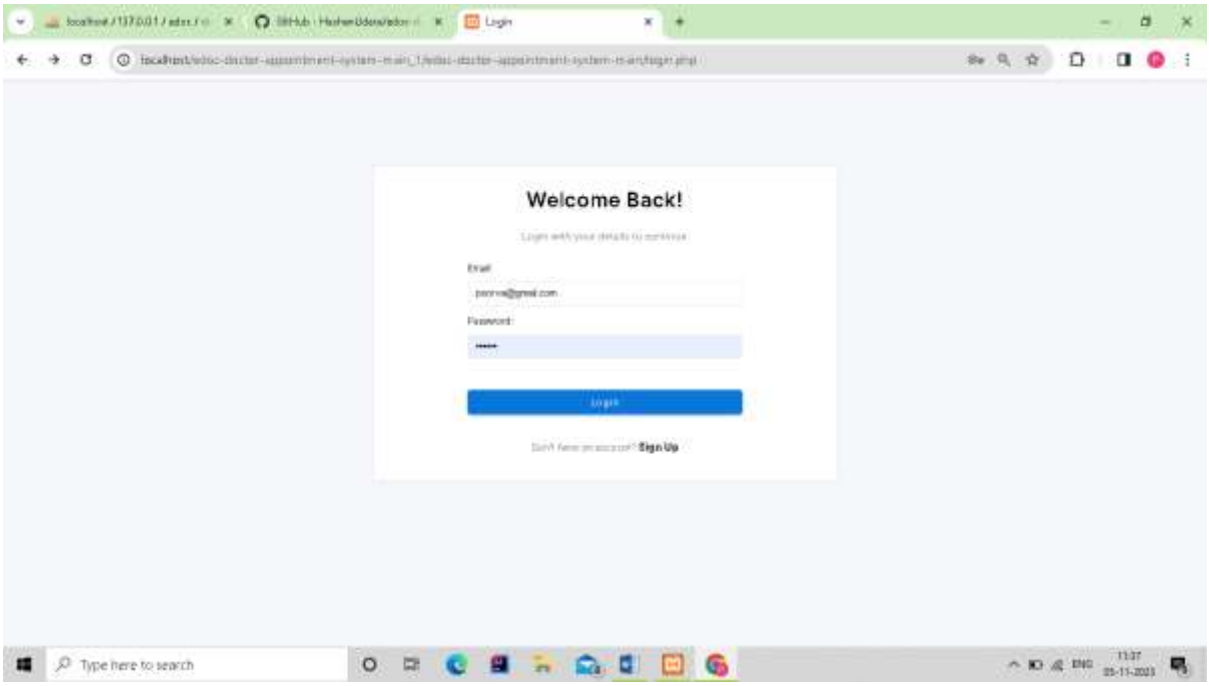
- **Appointment Details:**

The list of patients who are consulted by any doctor.

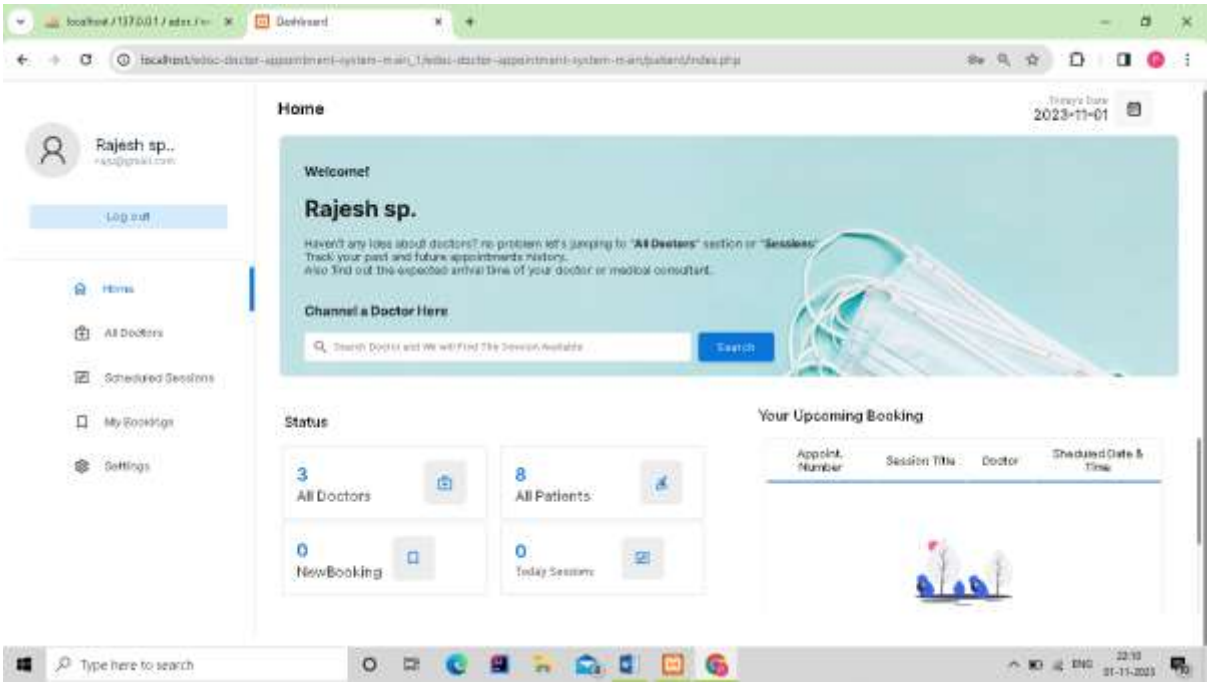
- **Queries:**

This module is of contact form the user or the doctor can contact admin with his query.

5.2.2 Patient Module



8.3 User Login



8.4 User Dashboard

- **Login / Sign-up**

  Login simply means to validate the User/Patient like authenticating the User. It means the User is identified and authenticated to make appointments with his desired doctor.

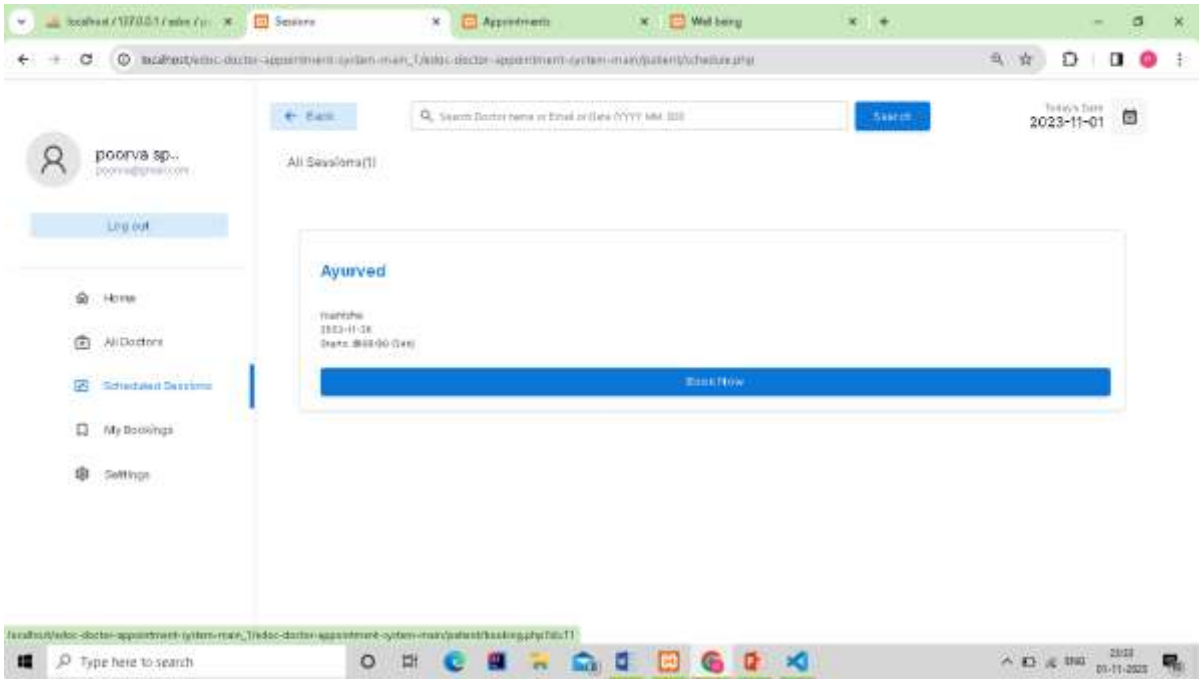
  Sign up is an action to register the User for a new account.

- **Schedule Appointment**

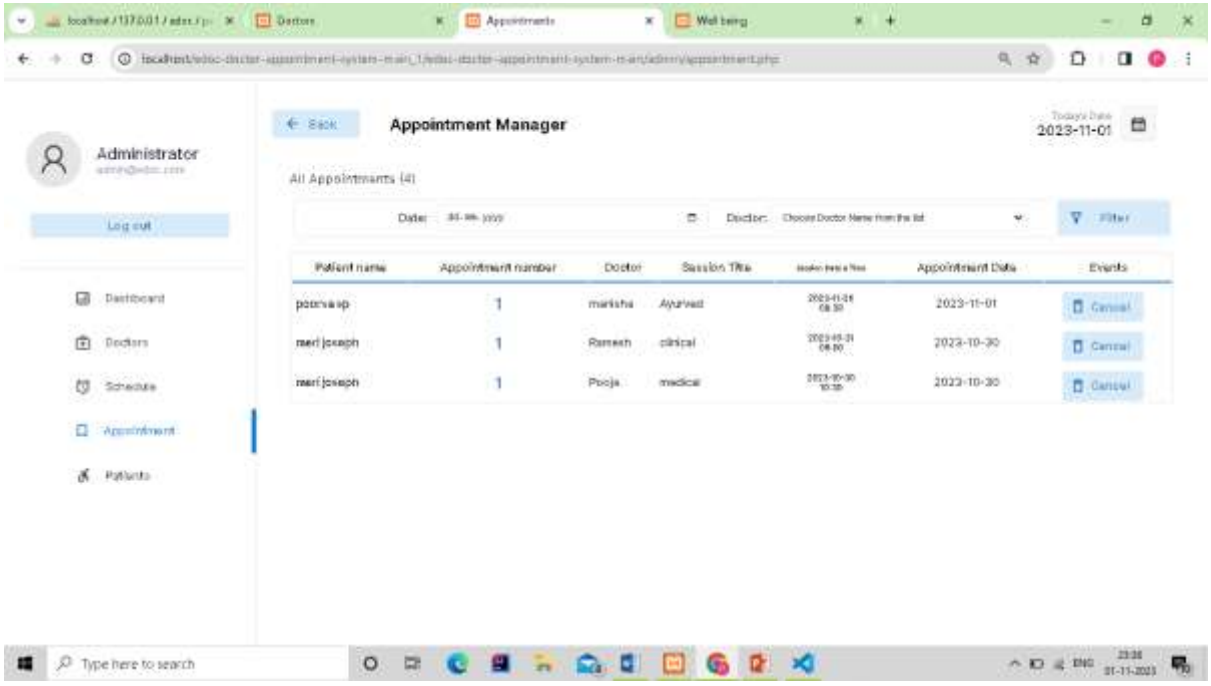
  User/Patient Can Schedule his appointment to the desired doctor where he'd like to get consultation from with his available free time.

- **My Appointments**

  This module helps patient with his own appointment records that he consulted with doctors

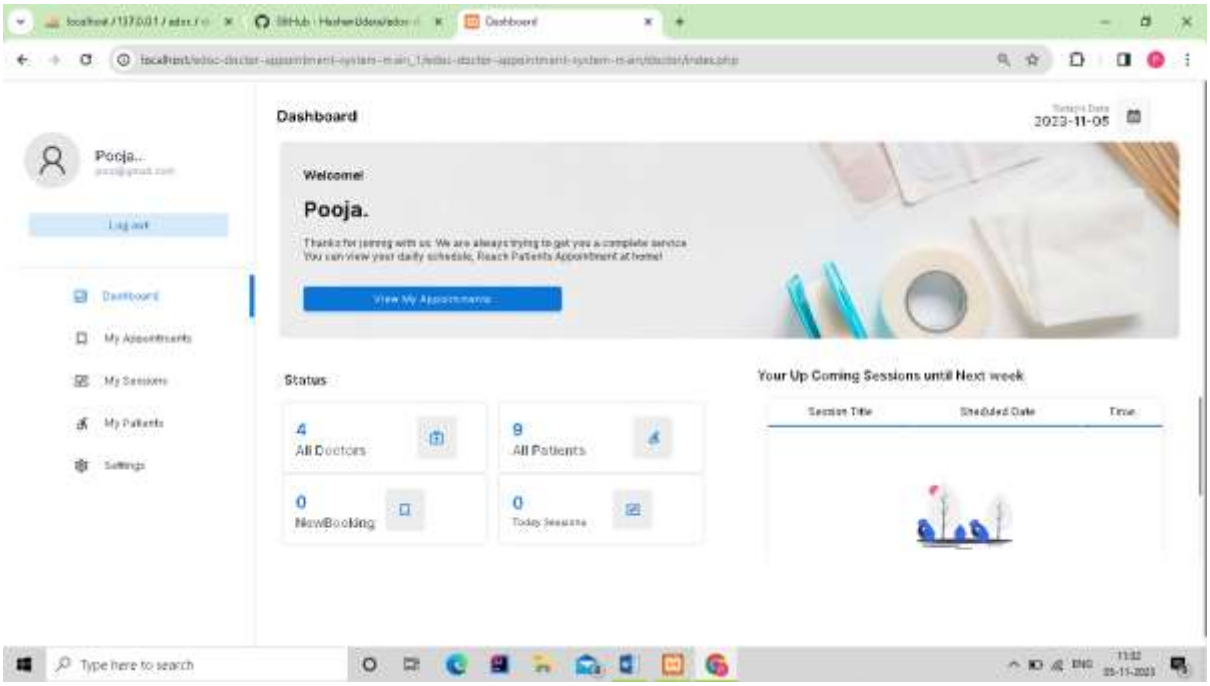


8.5 Book Appointment



8.8 Appointments list Admin

5.2.3 Doctor Module



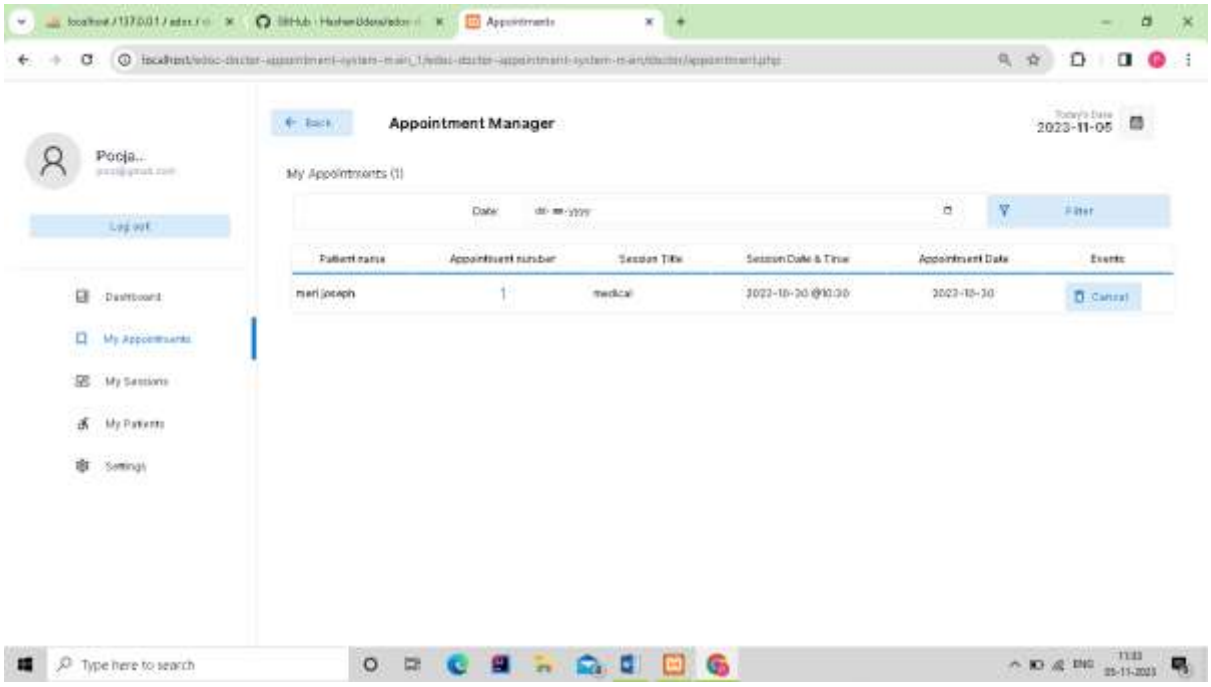
8.9 Doctor Dashboard

- **Login / Sign-up:**

  Doctors need to login to their account to view their appointments and prescribe patients.

- **View Appointments:**

  Doctor can view his patients' appointments.



8.10 Doctor Appointment List

CHAPTER 7
FUTURE ENHANCEMENT

Online system is always a changeable system. It develops day by day, getting better and better and easier for people. This could be a revolutionary web application that may help bonding between doctor and patient. We believe we can make this system more advanced in future. Advance features and User interface will be updated in future. Our system is already user friendly but we will try to make this system more user friendly in future.

There are also few features which can be integrated with this system to make it more flexible. Below list shows the future points to be considered.

- Video Conferencing facility for remote areas for treatments
- Hangout for different doctors and patients at different locations
- Blood bank information management

Conclusion

The whole systems are divided into three major parts like patients, doctors and admin. Each one has their own role to perform and system respond accordingly. Several agents have been created using web services and inter agent communication is done. Moving on, this simple hospital management system project in PHP focuses mainly on dealing with numerous hospital records. Also, the system displays all the available records of patients and their appointments. In addition, the system allows registering doctors too. The project is divided into three categories: Admin, Doctor, and Patient. In an overview of this web application, the patient can proceed with booking an appointment. For this, the user has to select doctor, specialization, date, and time. After the selection of the doctor, the system displays the total fees for it. Besides, the patient can view his/her appointment history and prescription details. Also, the patient can cancel an appointment anytime.

References and Bibliography

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