

**A Mini Project Report**

**on**

**E – DOCTOR APPOINTMENT**

**by**

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and Affiliated to JNTUH, Hyderabad)**

**Bachupally, Hyderabad – 500090**

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## **CERTIFICATE**

This is to certify that the mini project entitled **“E-Doctor Appointment”** done by **Ms. Y. Lakshmi Pratyusha (16WH1A1254), Ms. T. Alekhya (16WH1A1257)** of **Department of Information Technology**, is a record of work carried out by them during IV Year I semester.

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## **ABSTRACT**

E-Doctor appointment is a smart web application, this provides a registration and login for both doctors and patients. Doctors can register by giving his necessary details like timings, specialization, etc. After successful registration, the doctor can log in by giving username and password. The doctor can view the booking request by patients and if he accepts the patient requests the status will be shown as booking confirmed to the patient. The patients must be registered and log in to book a doctor basing the category and the type of problem patient is facing and the location. The search results will show the list of doctors matching patients required criteria and he can select one and send a request the request will be forwarded to doctor and if he is available he will send the confirmation request back to patient and the booking request will be updated and shows confirmed to the patient. The patient can view the status in the view appointment status tab.

## **1. INTRODUCTION**

E- Doctor Appointment is a dynamic web application that consists of four modules they are Admin module, Doctor module, User / Patient module and Search module. The Admin module performs registering hospitals, viewing registered hospitals list and can also view the list of registered doctors. The Doctor module performs viewing the appointments which are booked by the patients. The User / Patient module can search for doctors of particular specialization of their choice and can make appointment to that particular doctor which are seen in the search page and they can book appointments by seeing the availability of doctors. User / Patient can also view their appointment status which they have booked earlier. Search module can be used by both registered or unregistered users for searching the doctors of different specializations. Use of this technology has many advantages for both the doctor and the patients that is the patients can save their time in searching for different doctors of different specializations.

## **2. TECHNOLOGIES**

### **2.1 HTML**

HTML stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within tag which defines the structure of web pages. This language is used to annotate (make notes for the computer) text so that a machine can understand it and manipulate text accordingly. Most of markup languages are human readable. Language uses tags to define what manipulation has to be done on the text.

HTML is a markup language which is used by the browser to manipulate text, images and other content to display it in required format. HTML was created by Tim Berners-Lee in 1991. The first ever version of HTML was HTML 1.0 but the first standard version was HTML 2.0 which was published in 1999.

#### **Features of HTML**

1. It is easy to learn and easy to use.
2. It is platform independent.
3. Images, video and audio can be added to a web page.
4. Hypertext can be added to text.
5. It is a markup language.

#### **Advantages**

1. HTML is used to build websites.
2. It is supported by all browsers.
3. It can be integrated with other languages like CSS, JavaScript etc.

### **2.2 CSS**

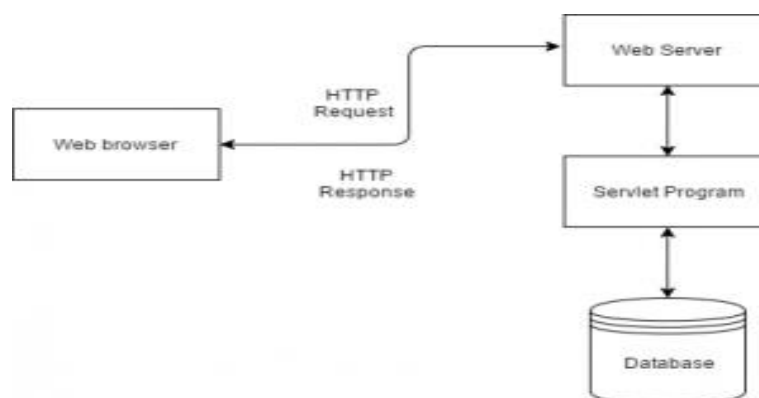
CSS stands for Cascading Style Sheets, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page. CSS is easy to learn and understood but it provides powerful control over the presentation of an HTML document.

## WHY CSS?

1. **CSS saves time:** You can write CSS once and reuse same sheet in multiple HTML pages.
2. **Easy Maintenance:** To make a global change simply change the style, and all elements in all the webpages will be updated automatically.
3. **Search Engines:** CSS is considered as clean coding technique, which means search engines won't have to struggle to "read" its content.
4. **Superior styles to HTML:** CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
5. **Offline Browsing:** CSS can store web applications locally with the help of offline cache. Using this we can view offline websites.

## 2.3 Servlets

Servlets are the Java programs that runs on the Java-enabled web server or application server. They are used to handle the request obtained from the web server, process the request, produce the response, then send response back to the web server. As Servlet Technology uses Java, web applications made using Servlet are Secured, Scalable and Robust.



**Figure 2.3 Servlets**

## Advantages of Servlets

1. Less response time because each request runs in a separate thread.
2. Servlets are scalable.



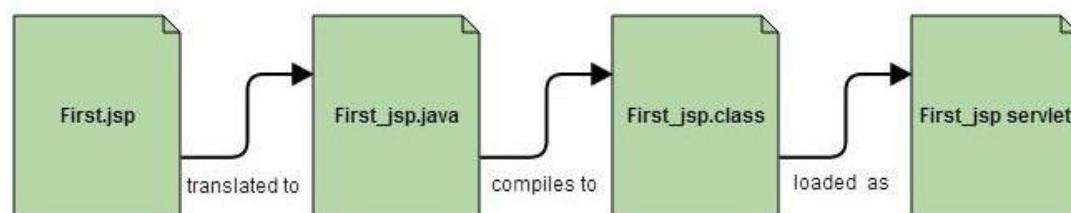
3. Servlets are robust and object oriented.
4. Servlets are platform independent.

## 2.4 JSP

Java Server Pages (JSP) is a server-side programming technology that enables the creation of dynamic, platform-independent method for building Web-based applications. JSP have access to the entire family of Java APIs, including the JDBC API to access enterprise databases.

JSP enables us to write HTML pages containing tags, inside which we can include powerful Java programs. Using JSP, one can easily separate Presentation and Business logic as a web designer can design and update JSP pages creating the presentation layer and java developer can write server side complex computational code without concerning the web design. And both the layers can easily interact over HTTP requests.

JSP pages are converted into Servlet by the Web Container. The Container translates a JSP page into servlet class source (.java) file and then compiles into a Java Servlet class.



**Figure 2.4 JSP**

## ADVANTAGES OF JSP

- JSP provides an easier way to code dynamic web pages.
- JSP does not require additional files like, java class files, web.xml etc
- Any change in the JSP code is handled by Web and doesn't require re-compilation.
- JSP pages can be directly accessed, and web.xml mapping is not required like in servlets.

### 3. MODULES

#### **A. Admin Module**

Admin need to login with his / her credentials that is username, password and user type. By logging into his / her account he can see the basic functionalities of admin. Admin can register hospitals by giving hospital details like hospital name, address, country, state, phone no and email-id. After entering all the details and by clicking on register hospital, the hospital gets successfully registered. Admin can view the list of registered hospitals and their details. Admin can also register doctors in particular hospitals by giving doctor details like doctor name, address, specialization, start time, end time, hospital name in which doctor is to be registered and email-id of the doctor. After entering all the details and by clicking on register doctor button, the doctor gets registered successfully. Admin can also view the registered details of all the doctors.

#### **B. Doctor Module**

Doctor need to login with their credentials that is username, password and user type. After registering he need to log in and in the home screen he can view the basic functionalities, like he can view the appointments which are booked by the patients. The list of patients who have booked appointment under that particular doctor is shown and he can accept or cancel the appointments.

#### **C. User Module**

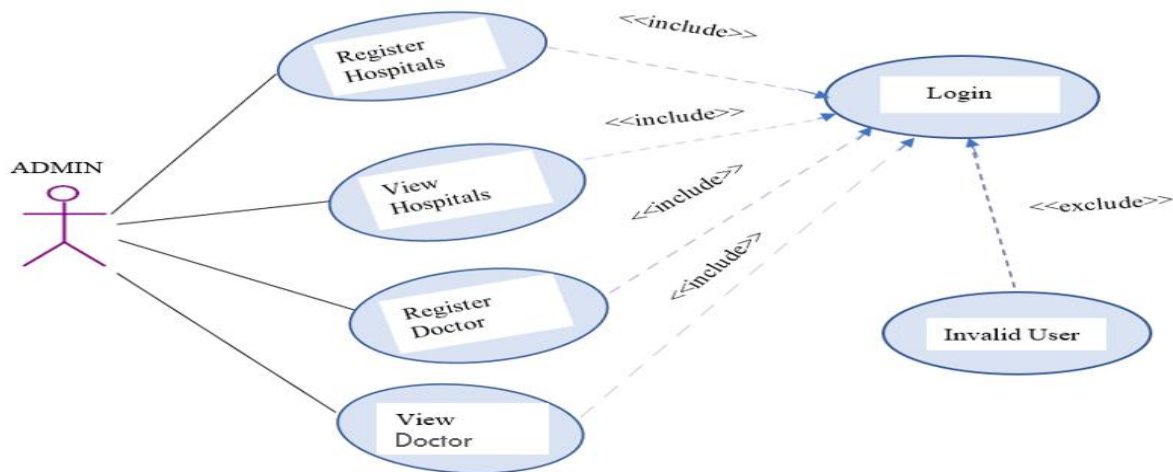
User need to login with their credentials that is username, password and user type. After logging on he can search for the doctor by giving the specialization and the list of doctors with that particular specialization will be shown and if the user wants to book an appointment they can select make appointment and fill the details like their name, gender, age, date of appointment, time, doctor name, hospital and should click make appointment, the message appointment booked successfully is shown to user.

#### **D. Search Module**

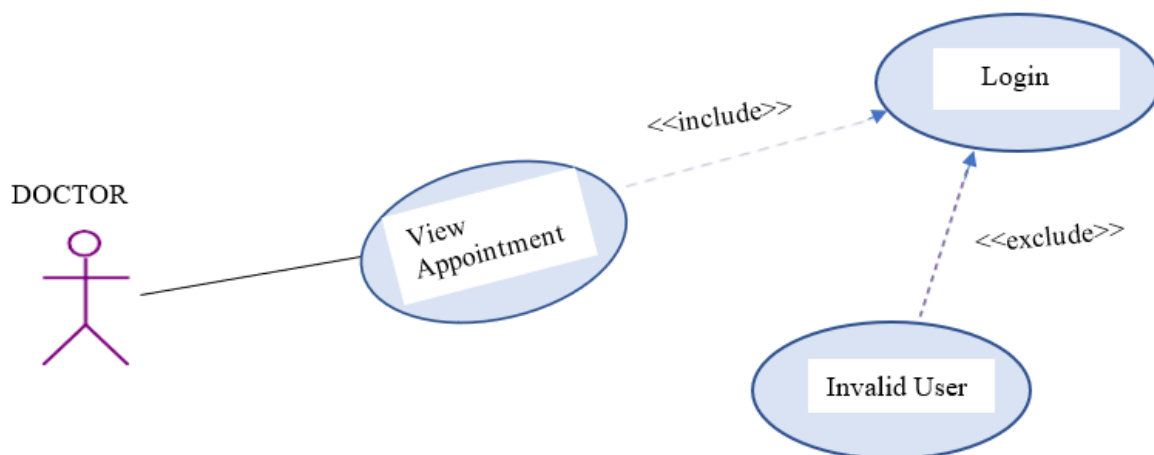
This module provides the functionality through which any registered or unregistered users can search for different doctors of different specializations and can view the details of hospitals and doctor in order to book an appointment they should first login if they have accounts or they should register if they are new users.

## 4. UML DIAGRAMS

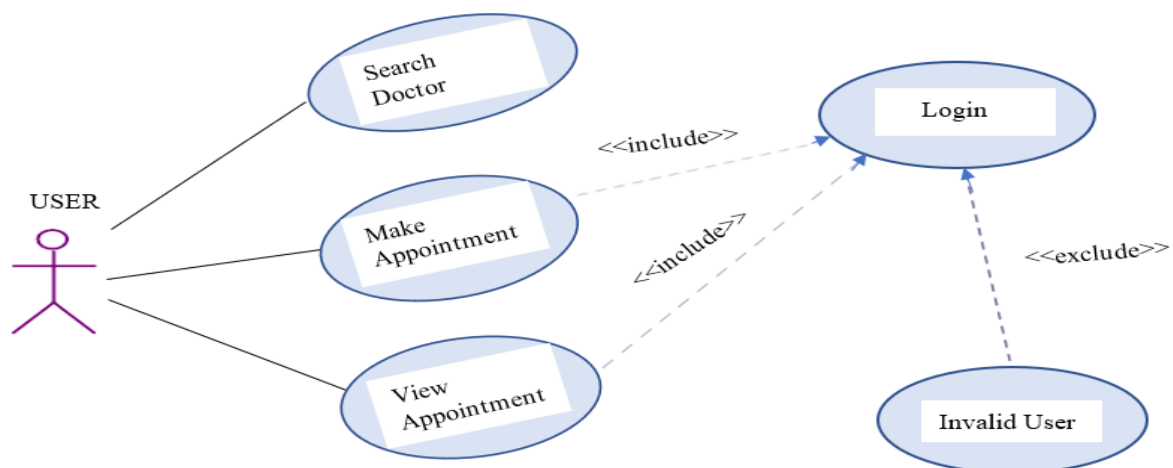
### 4.1 Use Case Diagram for Admin



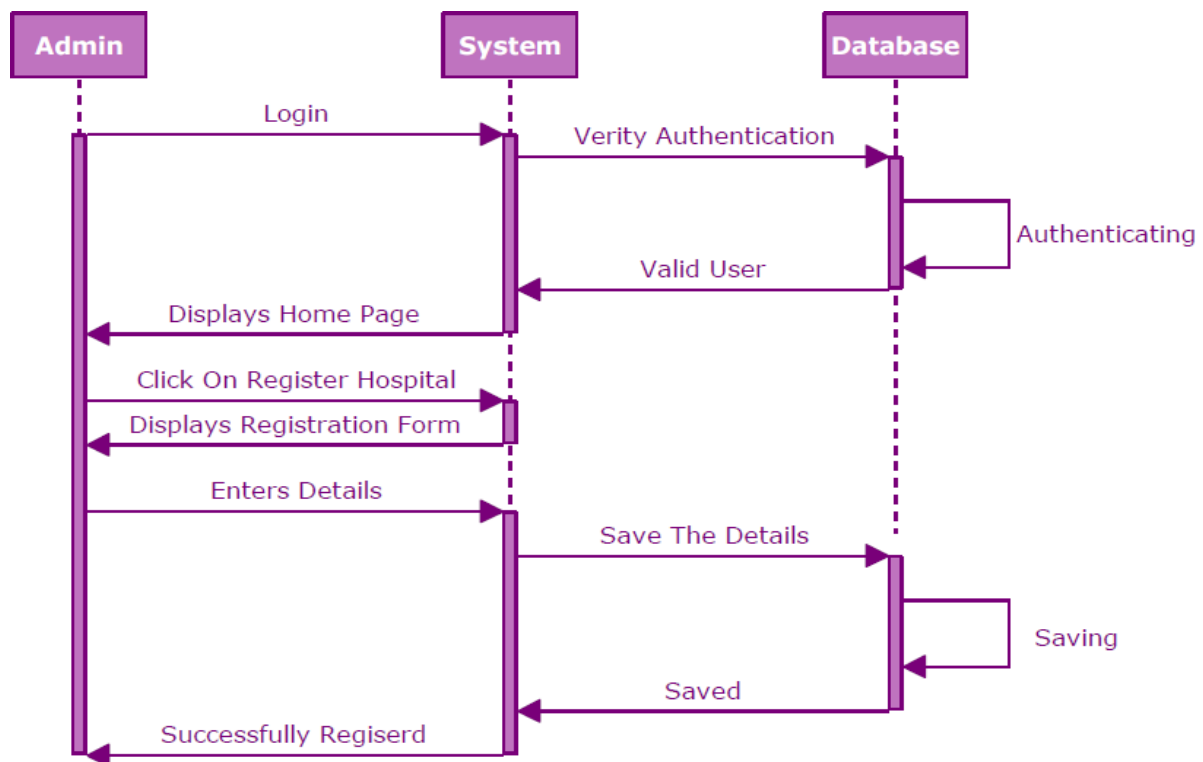
### 4.2 Use Case for Doctor



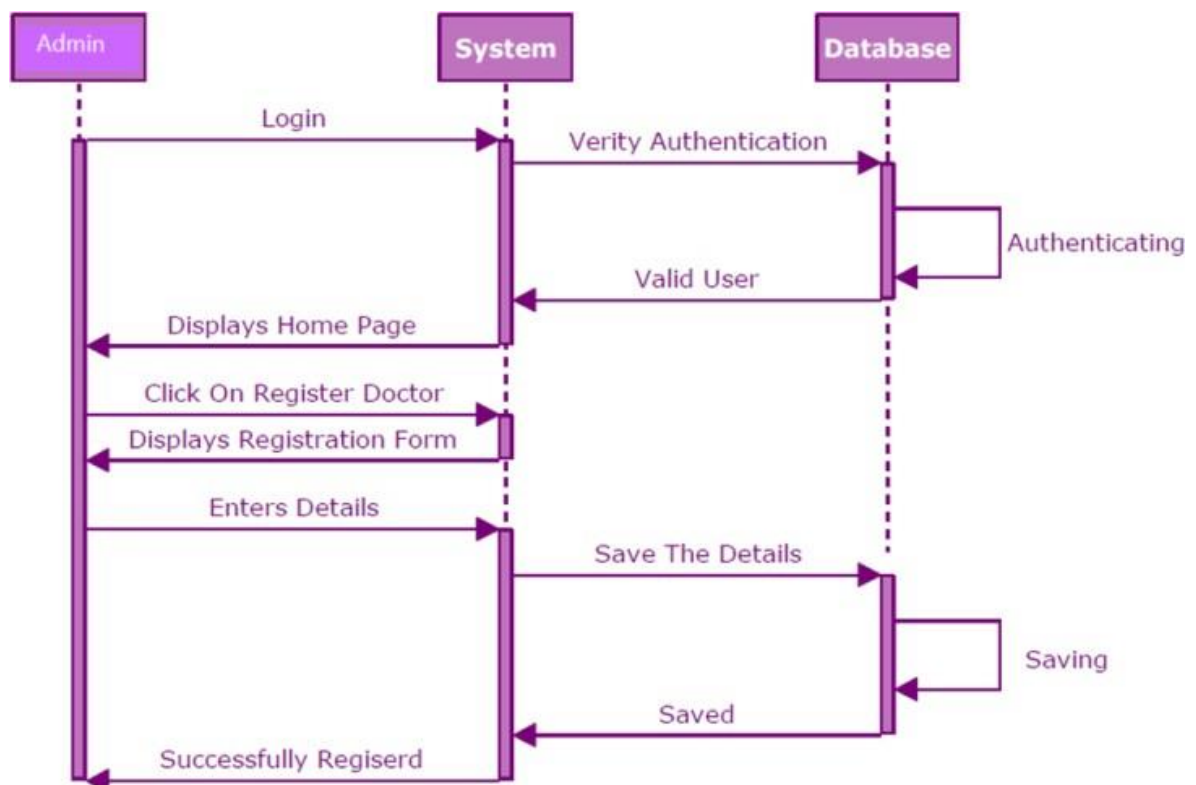
### 4.3 Use Case for User/Patient



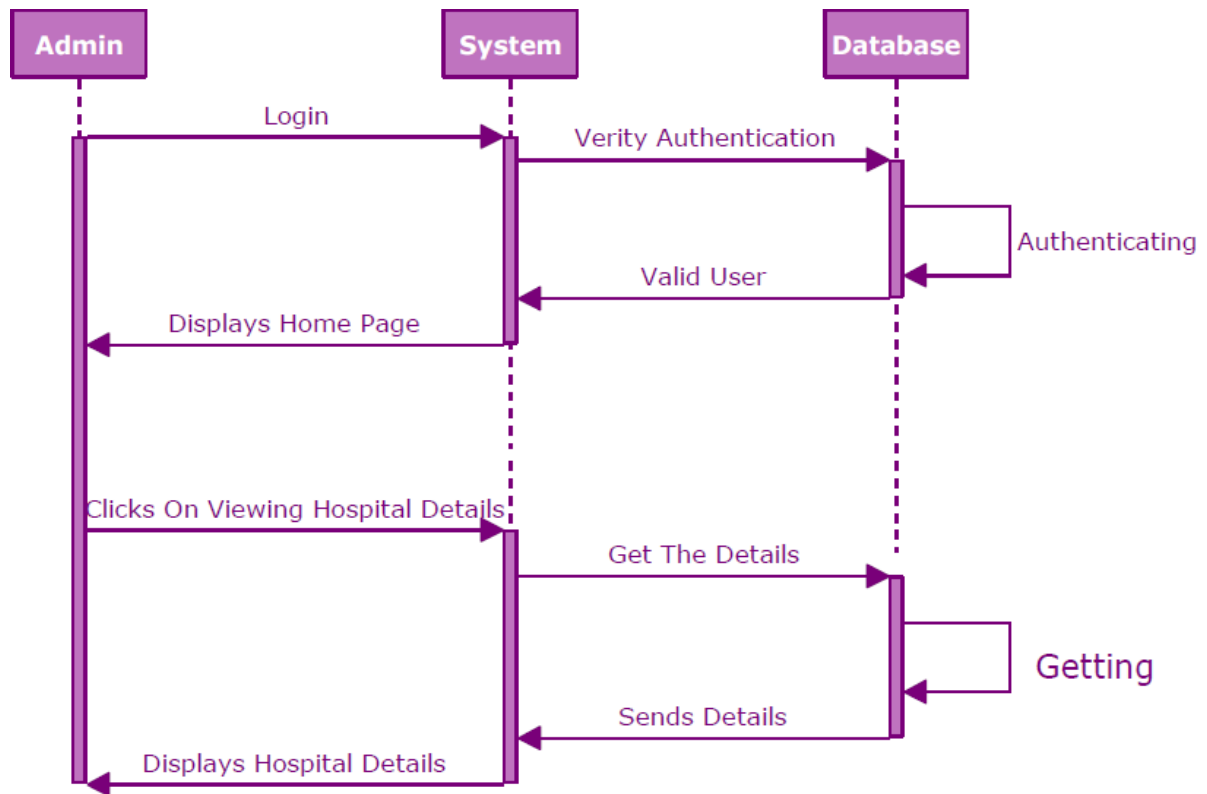
#### 4.4 Sequence diagram for registering hospital



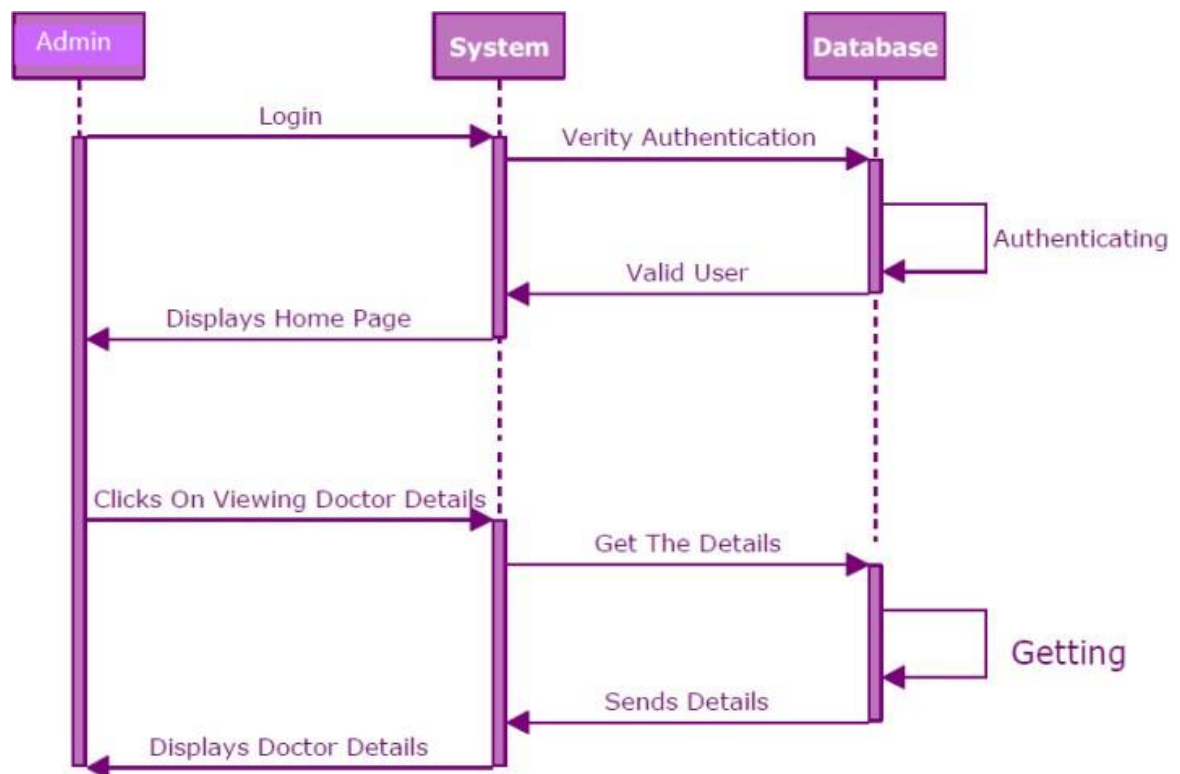
#### 4.5 Sequence diagram for registering doctor



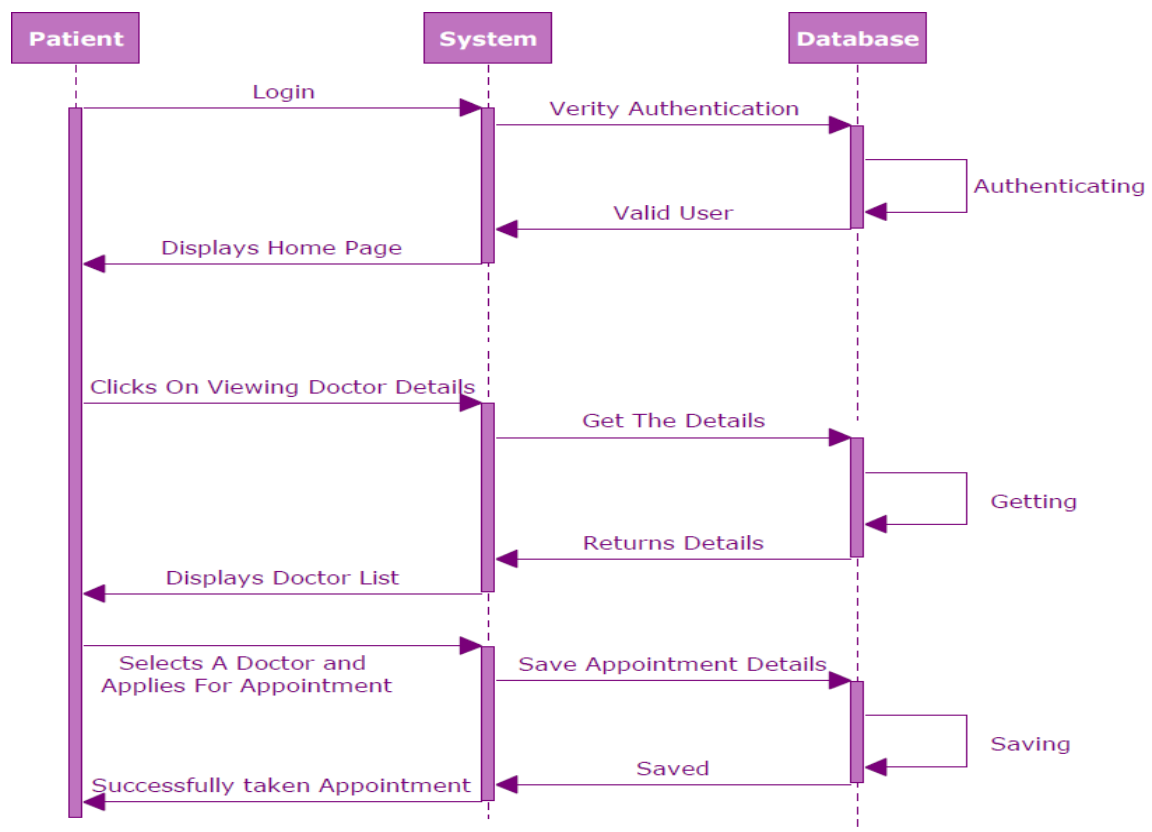
#### 4.6 Sequence diagram for viewing hospitals



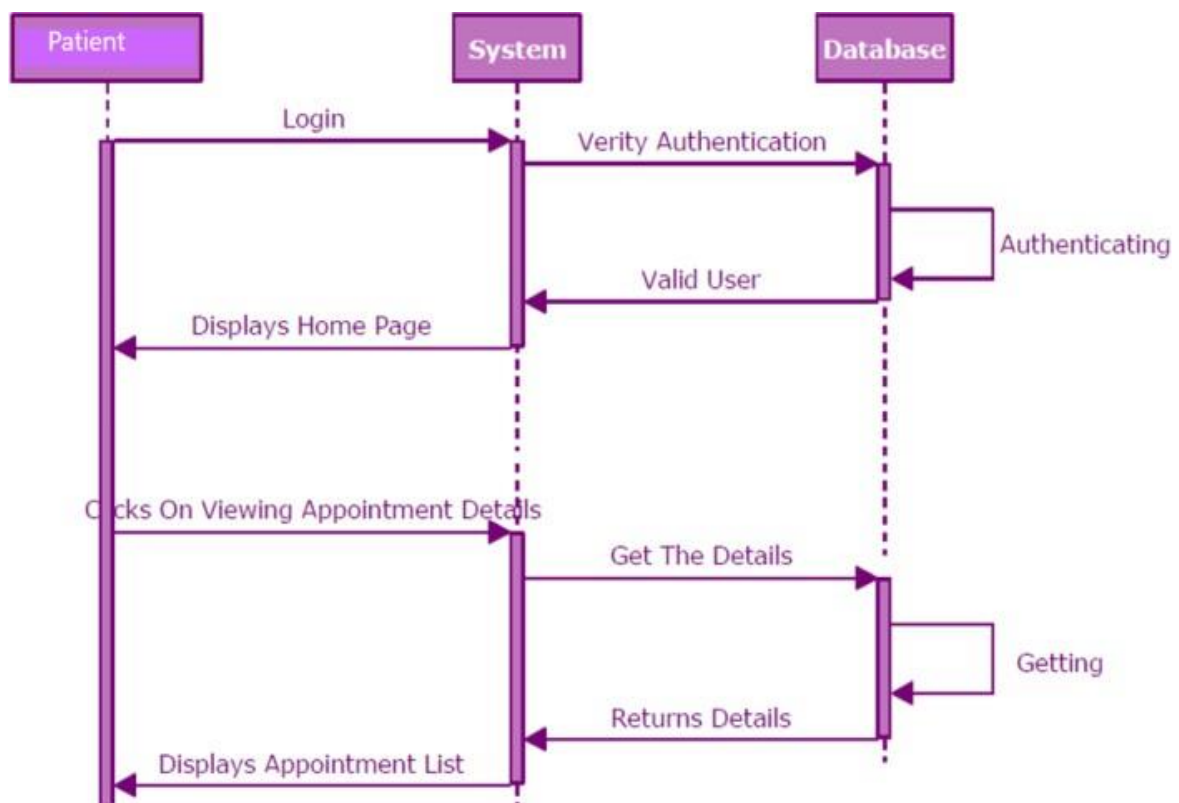
#### 4.7 Sequence diagram for viewing doctor details



#### 4.8 Sequence diagram for taking appointments



#### 4.9 Sequence diagram for viewing appointments



## 5. RESULTS

### 5.1 Home Page

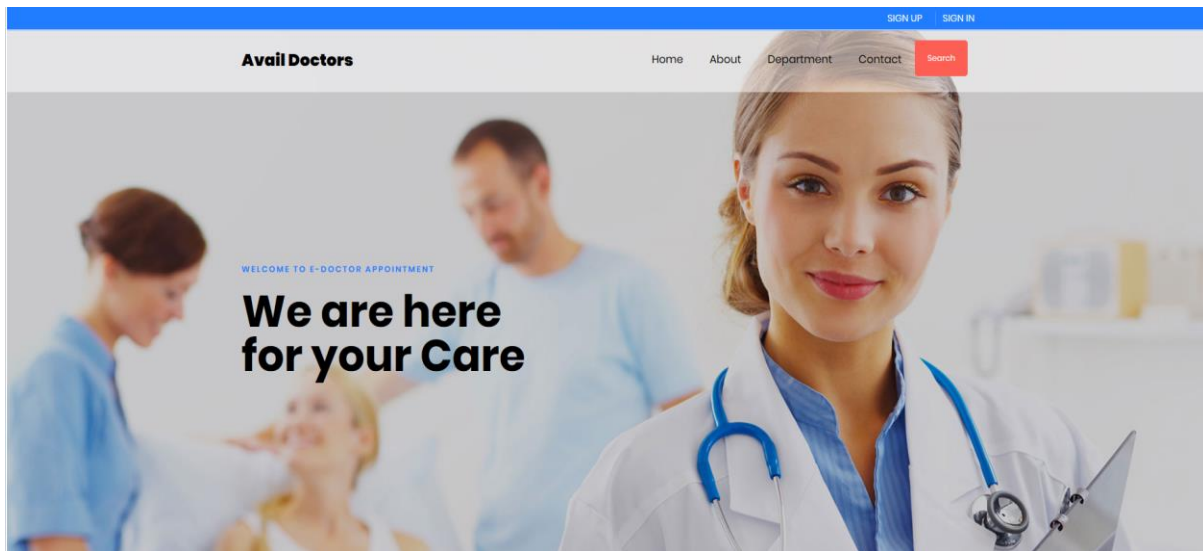


Figure (a) Home page

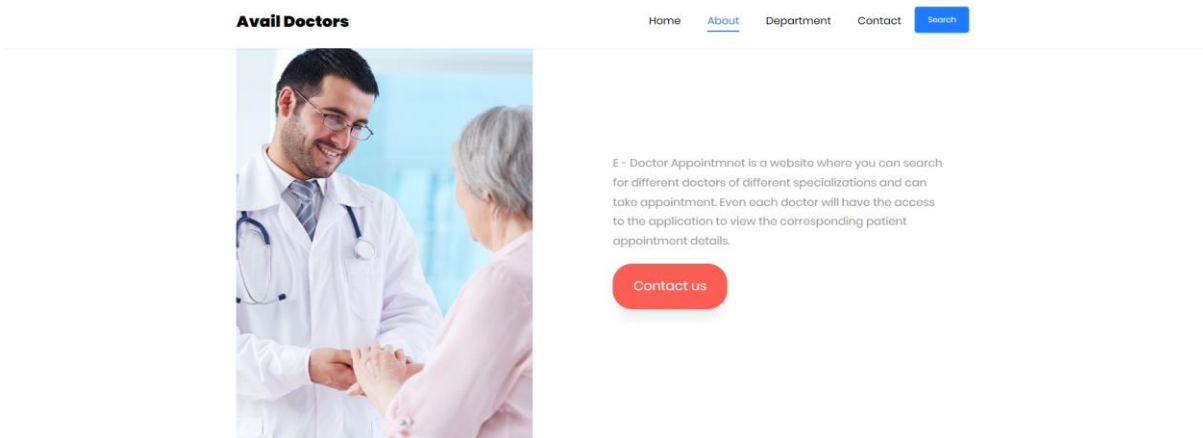


Figure (b) About us

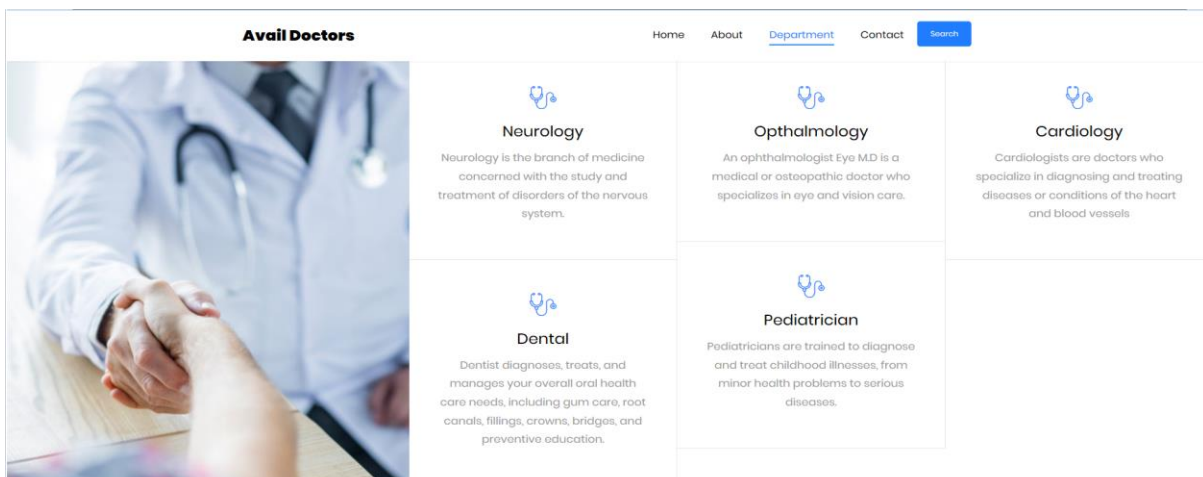



Figure (c) Departments




**Avail Doctors** Home About Department Contact Search

## Contact Us




ADDRESS

124D, Ballad Estates,  
Tarnaka, Hyderabad.




CONTACT NUMBER

+ 040-99999999



EMAIL ADDRESS

availdoctors@gmail.com



WEBSITE

availdoctors.com

Figure (d) contact us

*Avail Doctors*

*Search*

Specialization

*Search*

Figure (e) search

*Avail Doctors*

*Doctor Details*

Name	Specialization	Start	End	Hospital	Email	
Dr. Aravind	BDS	10:00:00	12:30:00	Remedy	draravind@remedy.com	<a href="#">Book Appointment</a>
Dr. Sahasra	BDS	06:00:00	08:00:00	Happy smile	happysmile@gmail.com	<a href="#">Book Appointment</a>

Figure (f) Doctor details based on search





*Please login to book appointments if you are already a user(Login)*

*Register if you are a new user(Register)*

### Figure (g) Login/Register

#### Login



*Username*


*Password*

*User Type*

*Login*

### Figure (h) Login Page

#### Register



*Username*

*Password*

*User Type*

*Register*

### Figure (i) Register Page

## 5.2 Admin Module

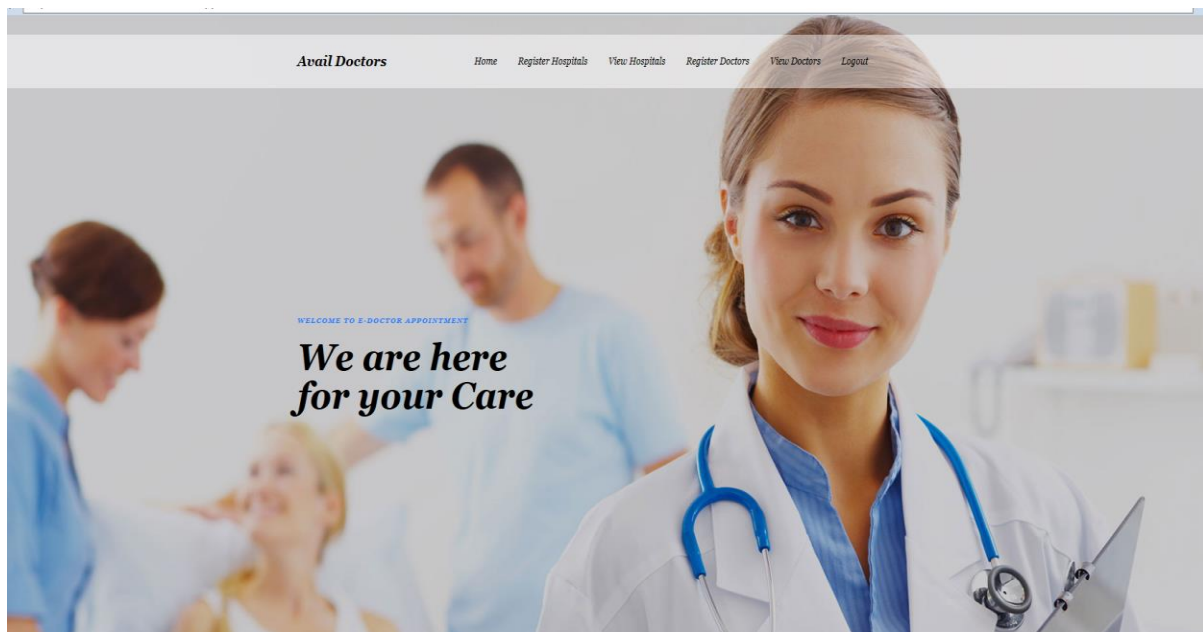


Figure (a) Admin home page

Figure (b) Register Hospitals

Figure (c) View list of registered Hospitals




### Hospital Details

Name	Address	State	Country	Phone	Email
Kims	Panjugutta	Telangana	India	9842972354	kimsanjugutta@gmail.com

**Figure (d) Hospital details**

**Avail Doctors**      [Home](#)   [Register Hospitals](#)   [View Hospitals](#)   [Register Doctors](#)   [View Doctors](#)   [Logout](#)

### Register Doctors



**Doctor Name**   
**Specialization**   
**Start time**   
**End time**   
**Hospital**   
**Enter Email**

**Figure (e) Register Doctors**

**Avail Doctors**      [Home](#)   [Register Hospitals](#)   [View Hospitals](#)   [Register Doctors](#)   [View Doctors](#)   [Logout](#)

### View Doctors

**Specialization**

**Figure (f) View list of registered doctors**



Figure (g) Doctor details

### 5.3 Doctor Module

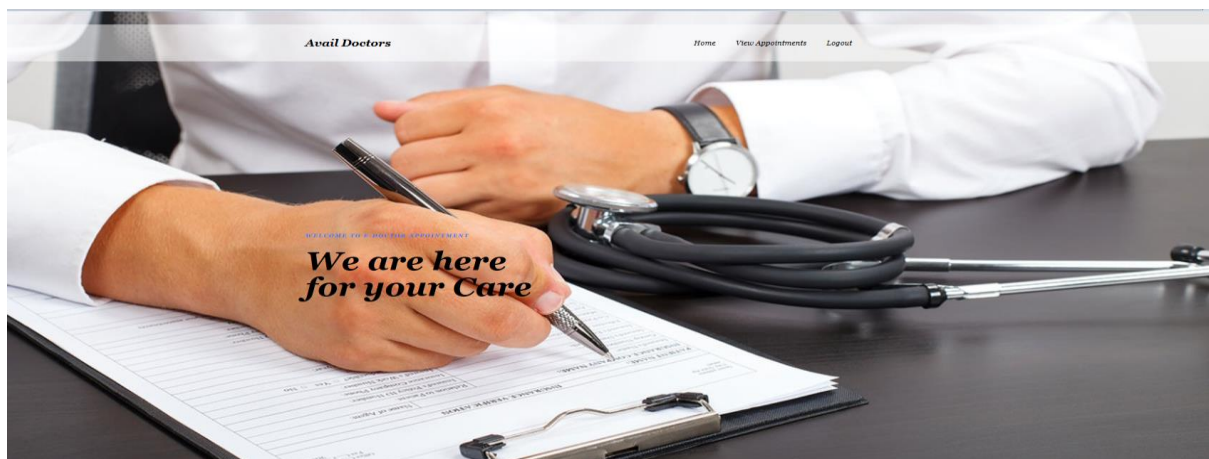
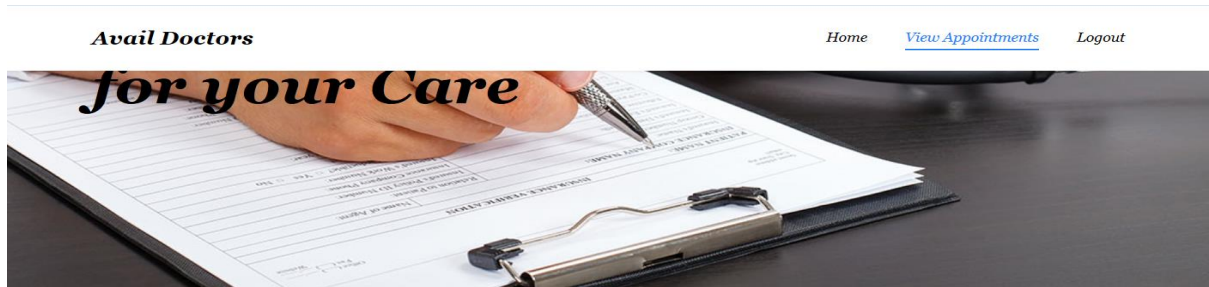


Figure (a) Doctor home page



### View Appointments

Doctor Name

[View Appointments](#)

Figure (b) View appointments



Appointment Details

Name	Gender	Age	Date	Time	Doctor	Hospital	
Pratyusha	Female	21	2019-11-11	11:00:00	Aravind	Remedy	Enter Patient <input type="button" value="--Accept/Delete--"/> <input type="button" value="submit"/>
Alekhyia	Female	20	2019-11-06	11:30:00	Aravind	Remedy	Enter Patient <input type="button" value="--Accept/Delete--"/> <input type="button" value="submit"/>

Figure (c) Patient details

## 5.4 User Module

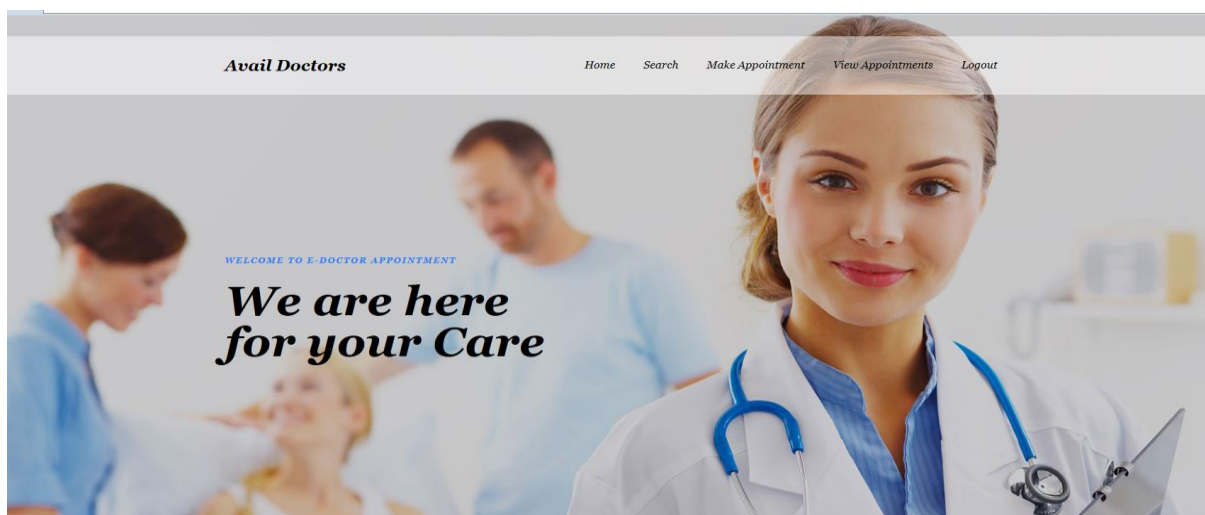


Figure (a) User home page

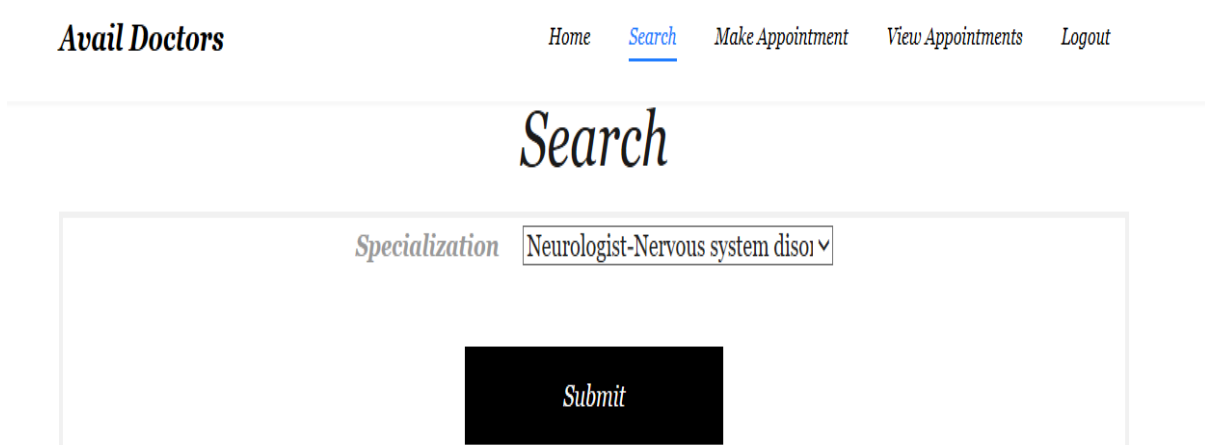


Figure (b) Search





### Doctor Details

Name	Specialization	Start	End	Hospital	Email	
Dr. Amar	Neurologist	10:30:00	12:30:00	Neehar Neuro Center	dramar@neuro.com	<a href="#">Book Appointment</a>

**Figure (c) Doctor details**

*Avail Doctors* [Home](#) [Search](#) [Make Appointment](#) [View Appointments](#) [Logout](#)

## Make Appointments

Name

Gender

Age

Date(YYYY-MM-DD)

Time(HH-MM-SS)

Doctor Name

Hospital Name

**Figure (d) Make appointment**

*Avail Doctors* [Home](#) [Search](#) [Make Appointment](#) [View Appointments](#) [Logout](#)

## View Appointment

User Name

**Figure (e) View appointment**



*Appointment Details*

Name	Gender	Age	Date	Time	Doctor	Hospital	Status
Alekhya	Female	20	2019-11-06	11:30:00	Aravind	Remedy	Accepted

**Figure (d) Appointment status details**

## **6. ADVANTAGES AND DISADVANTAGES**

### **6.1 ADVANTAGES**

- Automated communications to patients through SMS and mails.
- Rescheduling Appointments.
- Finding doctors, hospitals in any location is easier.
- No waiting for appointments.

### **6.2 DISADVANTAGES**

- Requires Internet access
- Miscommunication Hurdles
- Uncertainty



## 7. CONCLUSION AND FUTURE SCOPE

The **E-Doctor Appointment** project has been successfully completed. One of the prime reasons that E – Doctor Appointment is gaining popularity in recent days is that the system provides an easier way for receiving health care facilities to the general users. This project is developed in a manner that is user friendly and required help is provided at different levels. The primary objective is to provide the interactive service to all the users to search for doctors and book an appointment easily. Different types of services are provided to both the admin and users. User can avail this service at anytime from anywhere.

There are also other features which can be integrated with this system to make it more flexible. The future points to be considered are sending an SMS or an email to patients after the confirmation of their appointment by doctor, billing of patients and creating a hangout for different doctors and patients at different locations.

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