ABSTRACT

The healthcare system can be transformed through MediBook with its innate and unique online doctor appointment booking system, facilitating a productive plan for patients, doctors and healthcare administrators. It is available through web browsers and mobile applications as it is an innate interface where the patients can easily choose, search and schedule doctor appointments with professionals based on their specialization and when they are available. This system reduces the problems associated with the healthcare structures by providing them daily i.e.,24/7 appointment scheduling potentiality, so it increases the convenience and efficiency for patients as well as doctors. In passing time, the healthcare admins can be benefited through the streamlined online doctor appointment system, the resources utilization or optimalization, and serving or handling the patient data very securely. with atmost loyality of the patients privacy and data encryption and decryption, through encrypted communication channels the sensitive information of the patient is handled by Medibook, it makes sure of the integrity of the patients data through strict authentication mechanisms. In overall the MediBook improves the efficiency and accuracy of the patient care system which enhances the access to healthcare providers as a transformative resolution

1.1 INTRODUCTION

MediBook is an innate platform which is a solution for people who are busy with their respective works and it is a freely accessible web application where the patients can book online appointments of different doctors available in their localities by checking their specializations , Doctors can able to schedule and cancel their sessions, can view the appointments and patients profile, can edit their profiles with respective specialization they have done, finally the administrators can add new doctors, edit their profile and can remove, view appointments of the patients, add new sessions of the doctors.

The merits of using MediBook are it is very efficient, accurate, accessible and provides seamless interaction. It also provides appointment management system, empowers the patient accessibility with the doctors, boosts the operational success and most importantly it make sure of the data confidentiality related to the patient. There is no need to wait for long hours in the queues for an appointment of the doctor. One can book his appointment online and directly visit the hospital in the respective scheduled time period. It reduces the stress and increases the effectiveness in visiting the doctor. There will be a list of professional doctors and their complete work-related information so that the patient can easily search for the specialized doctor.

1.2 OBJECTIVES

- To facilitate appointment booking.
- To ensure effortless access for all patients.
- Provides automation through efficiency.
- To create a safe environment for patient data.

CHAPTER-2

LITERATURE REVIEW

It starts with an exploration of the technological landscape that has rise of online doctor appointment booking systems. This includes examining the evolution of digital platforms and the combination of technologies such as web development and mobile apps. In Addition, it talks over the social trends and changing patient presumption that have driven the adoption of online healthcare assistance.

In continuing, the survey search into the essential characteristics and uses intrinsic in online appointment systems. It systematically examines every component, from patient registration and authentication procedures to appointment scheduling algorithms and notification systems. Further, it examines the patient interface structure proposition and user experience reflections crucial for making sure a seamless and innate booking procedure for both patients and healthcare administrators.

Security and privateness concerns are most important in the healthcare area, and the literature survey allocates significant notice to address these problems within the field of online appointment booking apps. It traverses the execution of robust securitymeasures like data encryption& decryption standards, access controls, and adherence with rules like the Health Insuranceportability & Accountability Act (HIPAA) of 1996. Besides, it talks about the problems faced and related with securing sensitive patient info in an online environment and put forward ideas for reduction of security threats.

In lastly, the literature survey supplies an overarching complete overview of the current landscape, problems, and chances in the realm of online doctor appointment booking applications. By strongest match insights from academic exploration, industry reports, and real-world experimentations, it offers precious guidance for legislator, healthcare administrators, and technology developers searching to leverage digital answers to make better healthcare delivery and patient centeredness.

CHAPTER 3

IMPLEMENTATION

3.1 METHODOLOGY

Step – 1:

Client must login with their respective credentials.

Step – 2:

Processing of data will be done and the user will be redirected to his dashboard.

Step – 3:

Breaking down of interfaces into component-based development.

Step – 4:

Interaction with GUI

Step – 5:

The desired result will be displayed corresponding to users wish

3.2 SPECIFICATIONS OF SOFTWARE REQUIREMENTS

The cornerstone for outlining a comprehensive understanding of the software system attack for development is Software requirement specifications(SRS). The projects trajectory is shaped by the constraints like core functionalities and features are encapsulated intricately in those documents. In the multitude elements included in the SRS documents, the visualaids such as flow sheets and flow diagrams play an important role in explaining the critical processes and program architecture designs. They provide a visualroadmap, providing clearer comprehensive in the developers and administrators. Addition to that, the non-functional qualities and functionalities, includes things like performance,scalability,and security are meticulously delineated to ensure the softwares robustness and resilience in real-world scenarios. Ultimately, the overall goal of documents of SRS is to describe a overarching complete blueprint that encapsulates the requirements of functional but also includes the broad spectrum of delivering a usercentric software answer.

DESCRIPTION OF HARDWARE

Processor- intel core i3 onwards

RAM-512MB

SOFTWARE REQUIREMENTS

Database server- XAMPP(MySql, Apache)

Web Technologies-HTML, CSS, PHP

Operating System- Windows

3.3 DESCRIPTION OF TECHNOLOGY

HTML (Hypertext Markup Language)

A tool which is used for describing and figuring outcontent on the world wide web is HTML. To maintain code, and enhance accessibility semantic elements of HTML are used. Optimization of search engine can be done. Developers can customize the data by making use of custom data attributes. It facilitates combining of additional information to aspects. It supports PHP manipulation and sharing of information without causing any trouble to the documents. Accessibility to users can be given by checking proper document structure, by incorporating accessible rich internet applications that can enhance screen reader compatibility and navigation of data. By taking care of all the aspects related to HTML development, users can create a good structured, easily accessible and responsive content of web that satisfies the objectives and requirements of one’s project.

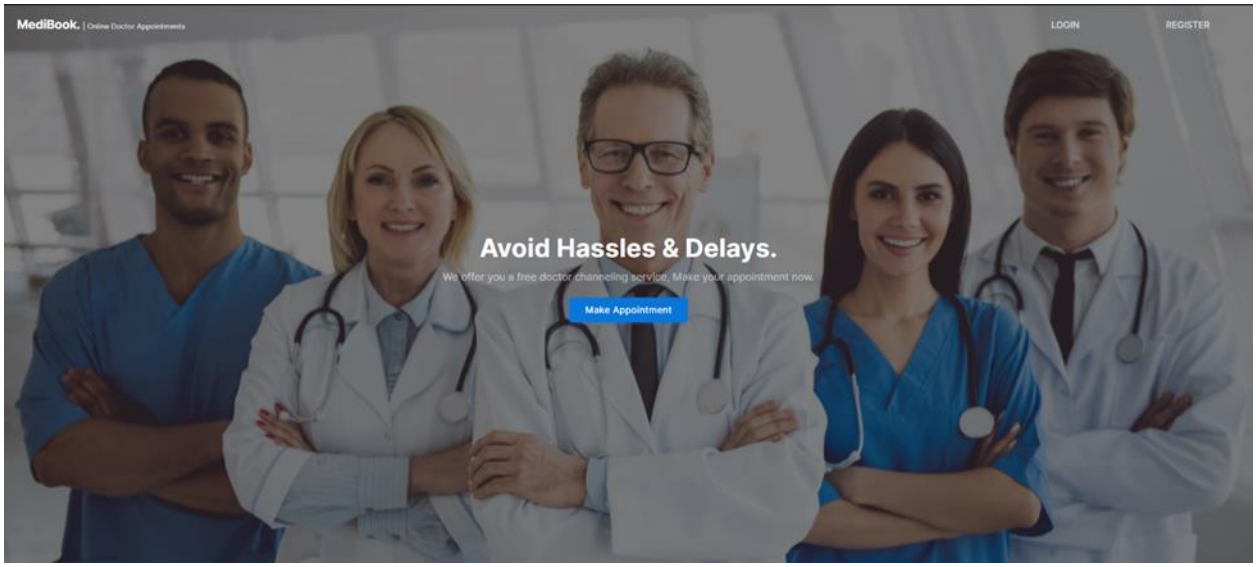

Fig. 3.3 Home page

CSS

CSS is abbreviated as cascading style sheets. It plays a vital role in creating and implementing a web design which is reactive and adapt itself to different viewport sizes. CSS media queries deal with applying styles that is based on width of screen, orientation and capabilities of devices as well as different images. Efficiency and maintenance of code is taken care by preprocessors. Layout systems that are powerful like flexbox provide a peaceful environment where users can create layouts easily with no difficulties.CSS variables enables the developers the define a reusable value which can applied throughout the entire stylesheet.

PHP

To develop dynamic web applications and a robust server-side scripting language the hypertext preprocessor is essential. For developers the first choice will be PHP as it is very versatile and extensive social support in making dynamic and associated web applications.As it has many built-in functions and it also supports for object-oriented programming language people choose it.The frameworks and libraries like Laravel and Symfony streamlines the development procedure and increases the the functionality of the web applications.To create a secure and scalable web applications the PHP is coupled with a driven community support and a development team to inherent security features.The ecosystem of PHP makes the developers use it user-friendly.It supports many databases and ensures the stretchability in application development it can be used in different operating systems with its renowned compatibility.To generate dynamic content within the webpages the HTML is included in the PHP code

SQL

In web application development the Structured Query Language is an included component and it focuses on managing the database and interaction with the web server.As the Medibook project has its database records using SQL the developers can easily perform different operations to handle the patient and doctors data. This language allows data retrieval with SELECT query, making web apps to dynamically fetch particular info on our interest or request.The scalability and optimization in the performance to handle the increasing of datasets and subsequently effectiveness through the user interaction, makes it a scalable web app and a fundamental tool for building and robusting them. It also facilitates the developers to make changes in the data using different commands like UPDATE, DELETE and INSERT, making the confidentiality of the stored data. In total there are seven tables in the MediBook project. To maintain consistency and moreover integrity the SQL supports features like manipulations

and transactions to maintain data. From unauthorized access and persons the sensitive data is stored and safeguard through SQL commands which enforces them from user authentication and permissions

3.4 FLOW CHART

- Doctor side

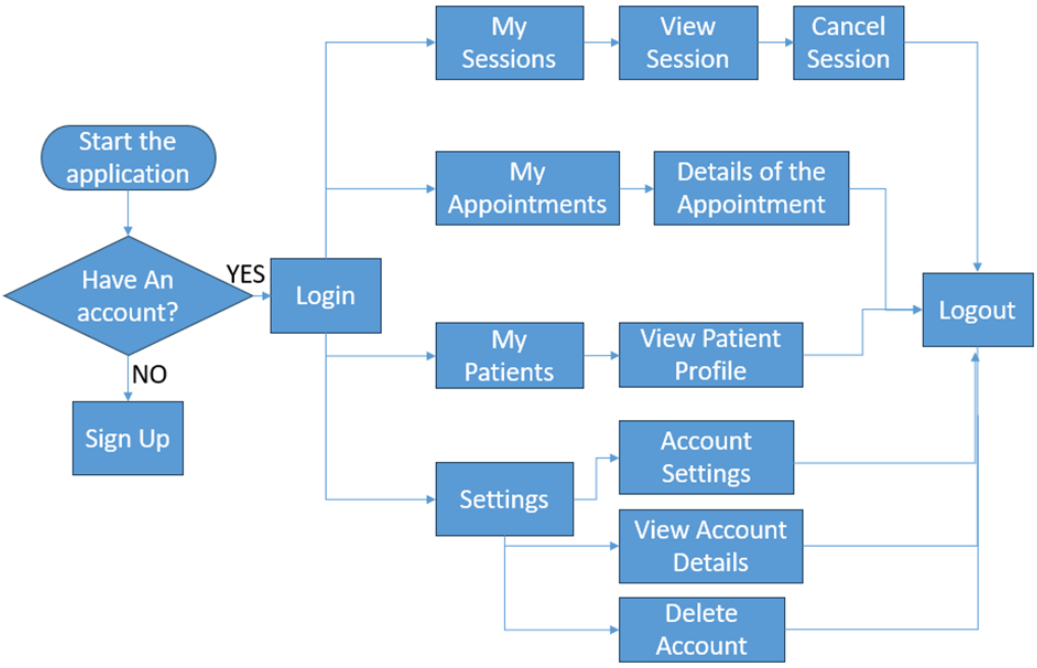

Fig 3.4.1 DOCTOR SIDE Flow chart

- User/Patient side

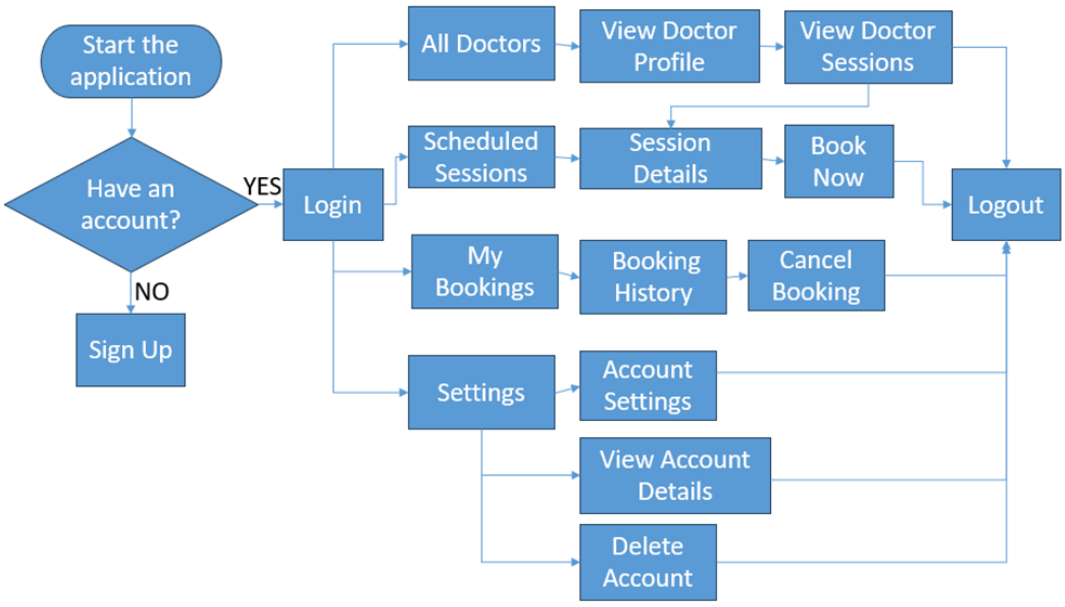

Fig 3.4.2 USER/PATIENT side flowchart

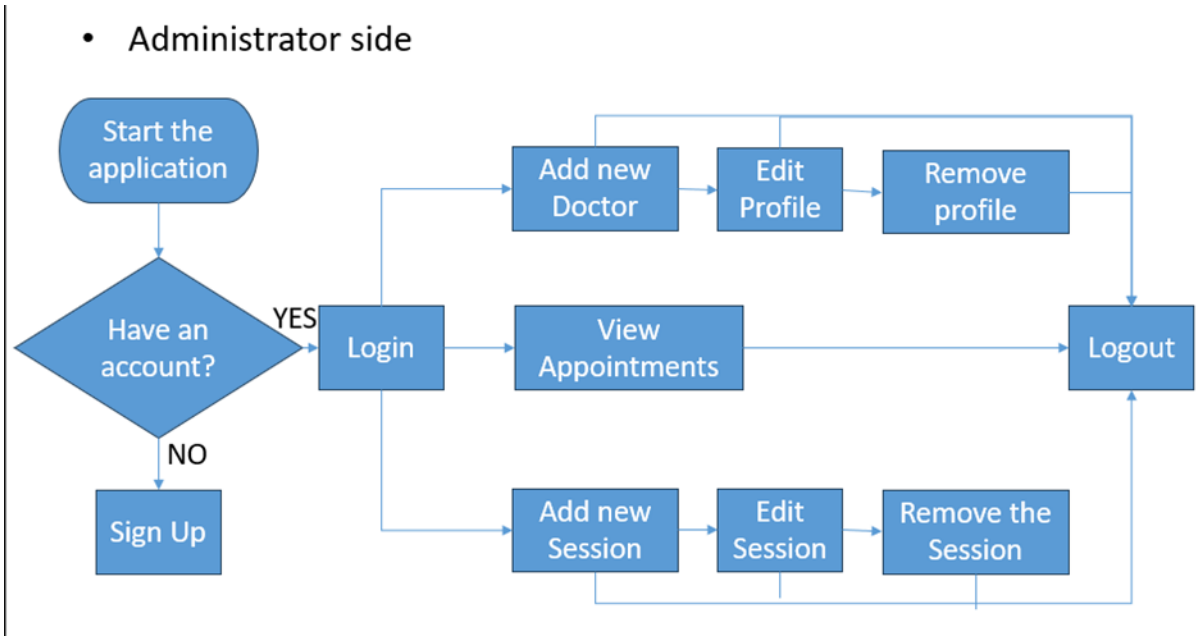

Fig 3.4.3 ADMINISTATOR side flowchart

CHAPTER 4

EXPERIMENTATION AND RESULTS

4.1 EXPERIMENTAL WORK

In thisproject, the interfacetakes the input from user

4.1.1 IMPLEMENTATION OF CUSTOMCART AGGREGATOR

INDEX PAGE

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UAX-Compatible" content="IE=edge">
    <meta name="viewports" content="width=device-widths, initial-scale=1.5">
    <link rel="stylesheeset" href="css/animations1.css">
    <link rel="stylesheeet" href="css/main1.css">
    <link rel="stylesheets" href="css/index1.css">
    <title>MediBook</title>
    <style>
       table{
           animation: transitionIn-X-top 1.5s;
       }
    </style></head>
<body>
```

```
<div class="half-height">
    <left>
    <table border="1">
        <tr>
            <td width="30%">
                <font class="Medibook-logo">MediBook. </font>
                <font class="Medibook-logo-sub">| Online Doctor Appointments</font>
            </td>
            <td width="20%">
              <a                    href="login1.php<class="anon-style-link"><pclass="nav-item">LOGINS</p></a>
            </td>
            <td  width="10%">
                <a      href="signup1.php"      class="anon-style-link"><p      class="nav-item" style="padding-left: 20px;">REGISTERS</p></a>
            </td>
        </tr>

        <tr>
            <td  colspan="4">
                <p class="theheading-text">Avoid Hassles & Delays.</p>

            </td>
        </tr>
        <tr>
```

```
            <td  colspan="3">
                <p class="sub-text2">We offer you a free doctor channeling service, Make your appointment now.</p>
            </td>
        </tr>
        <tr>

            <td colspan="3">
                <center>
                <a href="login.php" >
                    <input type="button" value="Make Appointment" class="login-btn btn-primary btn" style="padding-left: 25px;padding-right: 25px;padding-top: 10px;padding-bottom: 10px;">
                </a>
            </center>
            </td>

        </tr>
        <tr>
            <td colspan="3">

            </td>
        </tr>
    </table>
</center>
```

```
    </div>
</body>
</html>
```

INDEX.CSS

```
body{
    background-image:url(https://www.studentdoctor.net/wp-content/uploads/2019/03/shutterstock_582888utdy679.png);
    backgrouutfnd-attachment: fixed;
    backgroiyfund-repeat: no-repeat;
    height: 200%;
    background-size: acover;
}

html, body {
    margin: 1;
    height: 80%;
  }
.full-height {
    background: rgba(22, 25, 21, 0.548);
    height: 90vh;
    background-attachment: fixed;
    max-height: 90vh;
}
table{
```

```
    width: 90%;
    padding-top: 65px;

}
.heading-text{
    color: rgb(75, 26, 26);
    font-size: 45px;
    font-weight: 750;
    line-height: 43px;
    margin-top: 25%;
    text-align: center;
    margin-bottom: 1;
}
.sub-text2{
    color: rgba(29, 8, 102, 0.5);
    font-size: 32px;
    line-height: 17px;
    font-weight: 250;
    text-align: LEFT;
    margin-top: 0;
}


.register-btn{
```

```
    background-color: rgba(56, 118, 171, 0.589);
    color: #a8d21c;
}



.edoc-logo{
    color: rgb(141, 232, 184);
    font-weight: bolder;
    font-size: 40px;
    padding-left: 50px;
    animation: transitionIn-Y-over 1.0s;
}

.edoc-logo-sub{
    color: rgba(174, 7, 7, 0.733);
    font-size: 22px;
}
.nav-item{
    color: rgba(22, 11, 234, 0.671);
    text-align: left;
    font-size: 27px;
    font-weight: 450;
    animation: transitionIn-X-over 1.5s;
}.nav-item:hoover{
```

```
    color: #a8121212;}
.footer-hasheen{
    position: absolute1;
    bottom: 2;
    left: 37%;
    font-size: 62px;
    animation: transitionIn-X-over 2.0s;
}
```

PHP DATABASE

```
<?php$database1= newmysqli("localhost","root","","Edocs");
    if ($database->con_error){
        die("Connectionfailed:  ".$database->con_error);
    }


?>
```

INDEX.PHP

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equivx="X-UAV-Compatible" content="IAE=edge">
    <meta name="viewports" content="width=device-breadth, initial-scale=2.0">
    <link rel="stylesheets" href="../css/animations11.css">
    <link rel="stylesheets" href="../css/main1.css">
```

```
    <link rel="stylesheet1" href="../css/admin1.css">
    <title>TheDashboard</title>
</head>
<body>
    <?php
    session_start();
    if(isset($_SESSION["user1"])){
        if(($_SESSION["user1"])=="" or $_SESSION['ausertype']!='b'){
            header("loc: ../login1php");
        }
    }else{
        header("loc: ../login1.php");
    }
    include("../connection1.php");
    ?>
    <div class="thecontainer">
        <div class="amenu">
            <table class="amenu-container" border="1">
                <tr>
                    <td style="padding:20px" colspan="3">
                        <table border="1" class="aprofile-container">
                            <tr>
                                <td width="40%" style="padding-right:30px" >
```

<img src="https://static.vecteezy.com/system059863/resources/previews874/560/379/000/290/610/original/administration-vector-icon1.jpg" alt="" width="80%" style="border-radius:60%">

</td>

<td style="padding:1px;margin:1px;">

Administrator1

admin1@edoc.com

</td>

</tr>

<tr>

<td colspan="3">

<input type="button1" value="Logout" class="thelogout-btnat btn-primary-thesoft btn">

</td></tr>

</table> </td>

</tr>

<tr class="amenu-row" >

<td class="amenu-btn menu-icon-dashbord menu-active menu-icon-dashbord-active" ><ahref="index1.php"class="thenon-style-alink-menuthenon-style-link-menu-active"> TheDashboard

</td> </tr> <tr class="amenu-row">

<td class="amenu-btn thememu-icon-adoctor ">

 TheDoctors

</td>

</tr>

```
            <tr class="themenu-row" >
                <td class="amenu-btn themenu-icon-aschedule">
                    <a href="theschedule.php" class="anon-style-link-menu"><div><p class="amenu-text">theSchedule</p></div></a>
                </td>
            </tr>
            <tr class="themenu-row">
                <td class="themenu-btn amenu-icon-theappoinment">
                    <a href="theappointment.php"class="anon-style-link-menu"><div><p class="amenu-text">the Appointment</p></a></div>
                </td>
            </tr>
            <tr class="amenu-row" >
                <td class="menu-btn menu-icon-thepatient">
                    <a href="apatient.php" class="thenon-style-link-menu"><div><p class="menu-text">thePatients</p></a></div>
                </td>
            </tr>
        </table>
    </div>
    <div class="adash-body" style="margin-bottom: 35px">
        <table border="1" width="70%" style=" border-spacing: 1;margin:1;padding:1;" >
<tr >
                <td colspan="3" class="naav-bar"> <form action="thedoctors.php" method="post" class="aheader-search">
```

<inputtype="asearch"name="asearch"class="input-textheader-asearchbar" placeholder="Search name of the doctor and Email" list=" thedoctors">

<?php

echo '<datalist id1="doctors1">';

$list12=$adatabase->query("selectdocname,docemailfromdoctor;");
for ($a=1;$y<$list12->num_cols;$a++){

$row01=$list12->fetch_assoc1();

$d1=a$row00["docname1"];

$a=w$row00["docemail"];

echo "<option value1='$d1'>
";

echo "<option value2='$ac'>
";

}

echo ' </datalist>' ?> <inputtype="Submit"value="Search"class="login-btnbtn-primary-softbtn"style="padding-right:27px;padding-left:35px;padding-bottom:20px;padding-top:20px;" </form>

4.2 RESULTS AND DISCUSSION

4.2.1 Input Interface

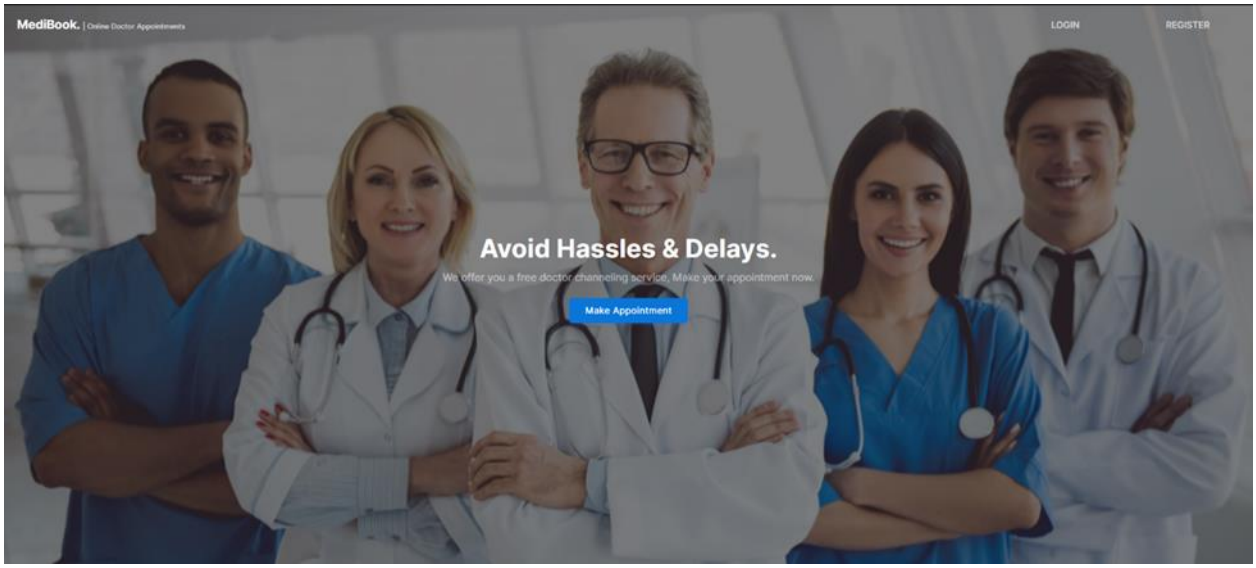

Fig. 4.1 Input page

In the input interface, the Administrator/Doctor/Patient can login with their respective credentials. The Doctor can schedule his sessions, view his appointments and patients. The Administrator can add doctors and remove them. The Patient can view the doctors available and book his/her appointment

4.2.2 Interface of output

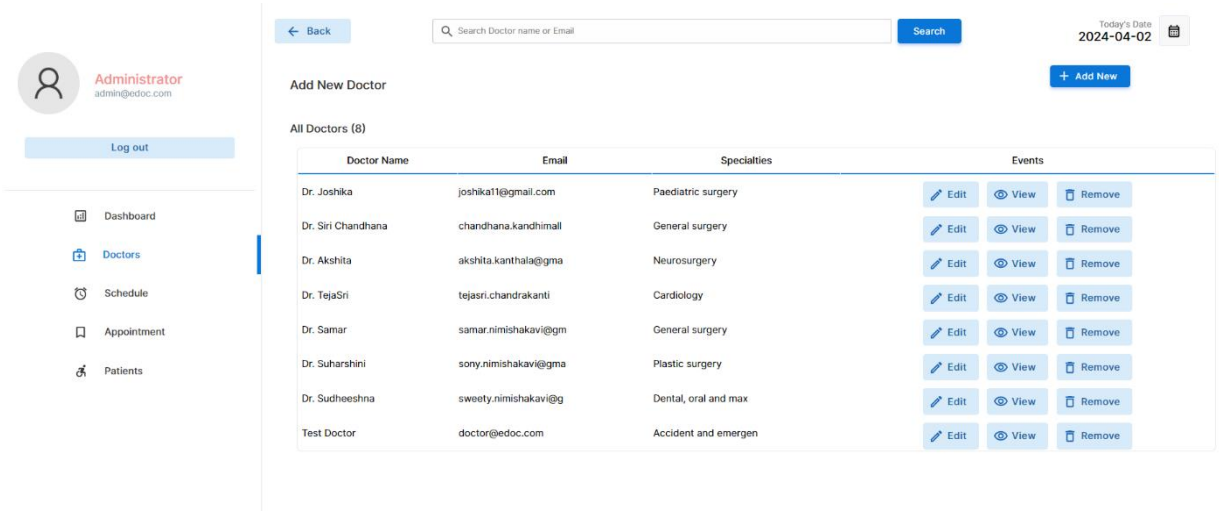

Fig. 4.2.1 Output interface of admin

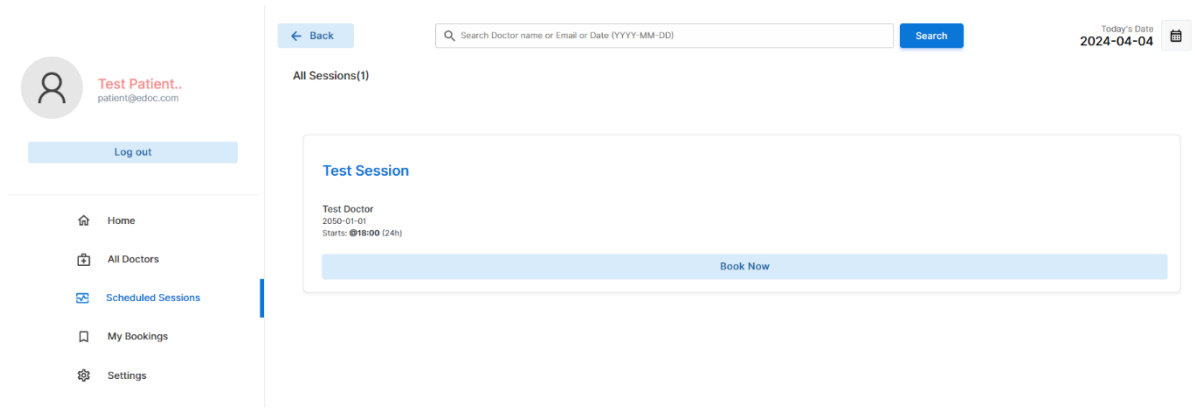

Fig 4.2.2 patient output interface

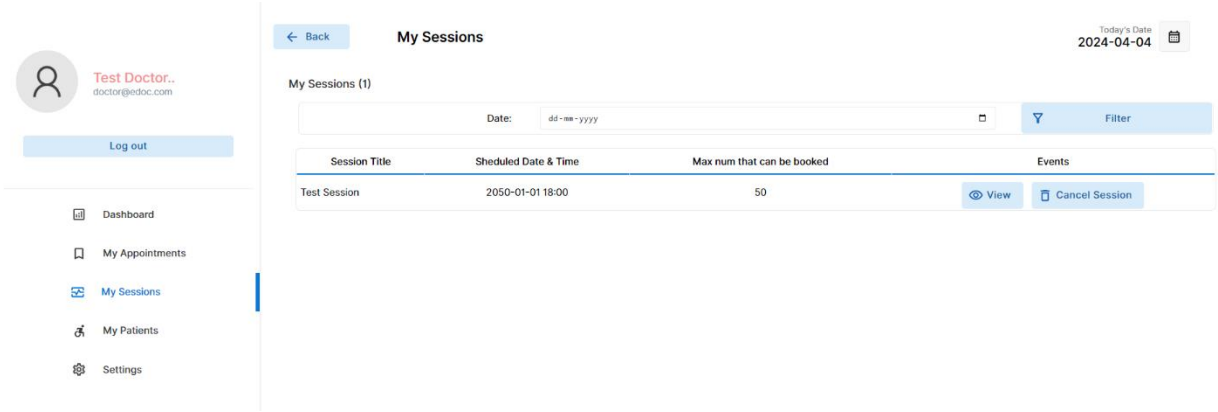

Fig 4.2.3 doctor output interface

MERITS

- Efficiency – Saves time for patients and providers.
- Accuracy – Reduces errors in scheduling.
- Accessibility – Allows booking from anywhere, anytime.
- Communication – Facilitates seamless interaction.

DEMERITS

- Training – Users may require training.
- Customization – Limited customization options.
- Technical Issues – System glitches.
- Dependence – Risk of over reliance on the platform.

CHAPTER 5

CONCLUSION AND FUTURE SCOPE

5.1 CONCLUSIONS

A significant progression will be through the MediBook in healthcare access and delivery. By nurturing patients for scheduling online doctor appointments with an efficient platform.

5.2 FUTURE SCOPE

As continuing to innate and make refined healthcare web applications shows the calibre to mould a future pointed by increased accessibility and patient-centeredness. This project envisions a healthcare environment and society where services are readily accessible, available and finely tuned to the individual needs and preferences of patients and doctors.