

# Literature Review on Web Applications for Online Mental Health Resources

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## 1 Abstract

This presentation shows a comprehensive website created by students to address the critical issue of insufficient access to mental health resources. The project used a cutting-edge technique that combined cooperative research with user-centric design concepts. The students wanted to give users a consolidated platform to quickly find and access mental health resources, therefore they implemented the website. The findings point to an improvement in users' capacity to quickly find pertinent resources, which will promote the growth of a more knowledgeable and encouraging mental health community. This project shows how technology-driven solutions might improve mental health support networks. The result summary is composed below with step-by-step procedures.

## 2 Introduction

The global conversation on mental health is becoming more and more recognized in today's environment, which highlights the urgent need for easily available and efficient mental health resources. It is indisputable that mental health issues are common, yet there is still a big disconnect between those who need care and the systems that provide it. The fragmented nature of the resources offered accentuates this gap, making it difficult for individuals in need to navigate and utilize the abundance of mental health services.

The goal of this project is to present a thorough website intended to act as a central repository for mental health resources in response to this urgent need. The goal is to make finding, obtaining, and using mental health services more efficient. Our research aims to close the gap between those in need of mental health help and the resources that are accessible, taking into account the various problems that these individuals experience.

This study’s backdrop stems from the increasing recognition of the critical role that mental health plays in overall wellbeing. An readily navigable platform becomes essential as the number of people seeking mental health support rises. By combining a wide range of mental health resources, the proposed website seeks to close this gap and provide consumers with a one-stop shop for all of their mental health requirements.

Our goal in doing this research is to address the existing issues with mental health accessibility and to add to the continuing conversation about mental health support. Our goal is to enable people to take charge of their mental health journey and to promote a wider social dialogue about mental health by providing an easy-to-use platform.

## **3 Literature Review**

### **3.1 Summary**

The papers in this collection cover a wide range of subjects related to the convergence of technology, database management systems, and mental health. The ethical ramifications of using mental health applications and privacy concerns with digital phenotyping are examined. The usefulness of digital mental health interventions is emphasized, highlighting the importance of varied study populations and resolving privacy issues with data. We talk about the shift in technology and the moral implications of using digital tools in healthcare. The research delves deeper into the benefits and drawbacks of employing virtual reality, adaptive programs, and mobile apps in mental health treatment. It is investigated how wireless sensor networks can be used to track students’ health and make the connection between physical and mental health. Studies on database management systems address a range of technologies and suggest ways to enhance security protocols. The impact of COVID-19 on mental health in various locations, user experience in digital therapies, and ethical considerations in mental health apps are also covered. The role of hope and optimism in fostering mental well-being as well as the integration of AI and database systems for mental health evaluation are covered. Together, the papers offer a thorough summary of the difficulties, developments, and moral issues surrounding the use of technology and information systems to deliver efficient mental health resources.

### **3.2 Gap Analysis**

There are a few significant study gaps, despite the fact that the collection of papers provides insightful information about the relationship between database management systems, technology, and mental health. First, as they can differ among different populations, a deeper investigation of the cultural and environmental factors influencing the uptake and efficacy of digital mental health therapies is necessary. Furthermore, a longitudinal perspective is frequently absent from the studies, and further investigation is needed to evaluate the long-term effects of digital therapies and applications on mental health outcomes. There is discussion of ethical issues, especially those pertaining to data security and privacy, but a deeper investigation of the ethical standards and frameworks unique to mental health technologies is necessary. To make sure that the created tools meet user expectations and therapeutic needs, the research could benefit from a more thorough collaboration with mental health professionals and patients. Moreover, there has been little research done on the possible hazards or unforeseen repercussions of the widespread usage of mental health applications. Finally, the study did not go into great

detail about the differences in access to online mental health resources, especially in areas with poor socioeconomic conditions or little access to technology. Reducing these disparities will aid in the creation of digital mental health solutions that are more ethically sound, culturally aware, and productive.

By incorporating practical insights from reviewed papers into a mockup website for mental health resource demonstration, our initiative seeks to close a research gap. This strategy demonstrates how database management systems can be used to provide easily available mental health materials via an intuitive web portal. The prototype illustrates how digital mental health interventions can be successfully incorporated into everyday situations by emphasizing user interface design, individualized experiences, and ethical considerations. This real-world application emphasizes how crucial it is to work in tandem with mental health specialists to guarantee compliance with clinical guidelines and user expectations.

## 4 Problem Statement

Mental Pressure is a real burden for the people of every generation, but especially today's. In a society that constantly undermines the mental pressure that people have to go through, mental health resources are not upto standard to meet their needs sufficiently. As a response to this, we want to create an application that helps connect users to mental health resources. Our approach with this started with the conduction of thorough research, we looked at existing database systems that relate to our problem statement, and tried to find shortcomings in them. In our methodology, we have tried to address all those shortcomings. Mental health in Bangladesh's society is quite undervalued, and our application aims to help those who require it most.

## 5 Problem Solution

1. User-Friendly Interface: - Designing a user-friendly and intuitive interface for the application; ensuring that it is accessible to people of all ages and tech literacy levels.
2. Comprehensive Database: - Developing a comprehensive database of mental health resources in Bangladesh, Including information on therapists, support groups, helplines, and other relevant services.
3. Geo-Location Services: - Implementing geolocation features to help users find mental health resources near their location. This can enhance the accessibility of services.
4. Crisis Support Feature: - Integrating a crisis support feature, such as a helpline or chat service, for immediate assistance during emergencies.
5. Multilingual Support: - Ensuring that the application supports multiple languages to cater to the linguistic diversity in Bangladesh. This will make the app more inclusive.
6. Educational Resources: - Providing educational content on mental health to raise awareness and reduce stigma. This could include articles, videos, and interactive modules.
7. Anonymous Support Options: - Including features that allow users to seek support anonymously if they are not comfortable revealing their identity. This can encourage more people to use the app.
8. Integration with Existing Systems: - Collaborating with existing mental health organizations and professionals to integrate their services into the app. This can enhance the

app's credibility and reach.

9. Community Building: - Facilitating community-building features such as forums or discussion groups where users can share their experiences and support each other.

10. Regular Updates and Maintenance: - Committing to regularly updating and maintaining the app to ensure that it stays relevant and continues to meet the evolving needs of users.

11. User Feedback Mechanism: - Implementing a feedback mechanism within the app to gather insights from users. This can help to continuously improve the app based on user experiences and suggestions.

12. Partnerships with Educational Institutions: - Collaborating with schools, colleges, and universities to promote the app and provide educational resources to students.

13. Awareness Campaigns: - Launching awareness campaigns on social media and other platforms to promote mental health education and the availability of your app.

14. Cultural Sensitivity: - Ensuring that the app's content and design are culturally sensitive to the unique aspects of mental health in the context of Bangladesh.

15. Lack of Information on Medicine Records or Prescription: - Collaborating with healthcare professionals to integrate a secure and confidential section for users to input their medicine records and prescriptions. Include features for users to set medication reminders and track their mental health progress.

16. Inability to Choose Consultants Independently: - Implementing a consultant selection feature that allows users to browse through available mental health professionals, view their profiles, expertise, and user reviews. Provide a transparent and user-friendly process for users to choose a consultant that best fits their needs.

17. No Alert Message after Appointment Submission: - Integrating an instant alert or confirmation message system that notifies users immediately after submitting an appointment. This ensures users that their request has been received and will be processed.

18. Rescue Teams Cannot Act Urgently: - Establishing a priority or urgent appointment system that allows users to flag their appointments as urgent, signaling the need for immediate attention. Provide a direct communication channel between users and rescue teams in case of emergencies.

19. No Suicide Helpline or Indication for Suicide Response: - Integrating a dedicated section for suicide prevention and mental health emergencies. Include a prominent helpline button that users can easily access in case of crisis. Implement protocols for immediate response, such as connecting users to a crisis helpline or providing resources for self-help during critical situations.

User privacy and data security should be a priority when implementing these solutions. Additionally, seeking input from mental health professionals and organizations to ensure that the solutions align with best practices in the field of mental health support should be considered. It is essential to involve mental health professionals, psychologists, and experts in the development and testing phases to ensure the app's effectiveness and ethical considerations.

## 6 Methodology

### 6.1 Problem Solution

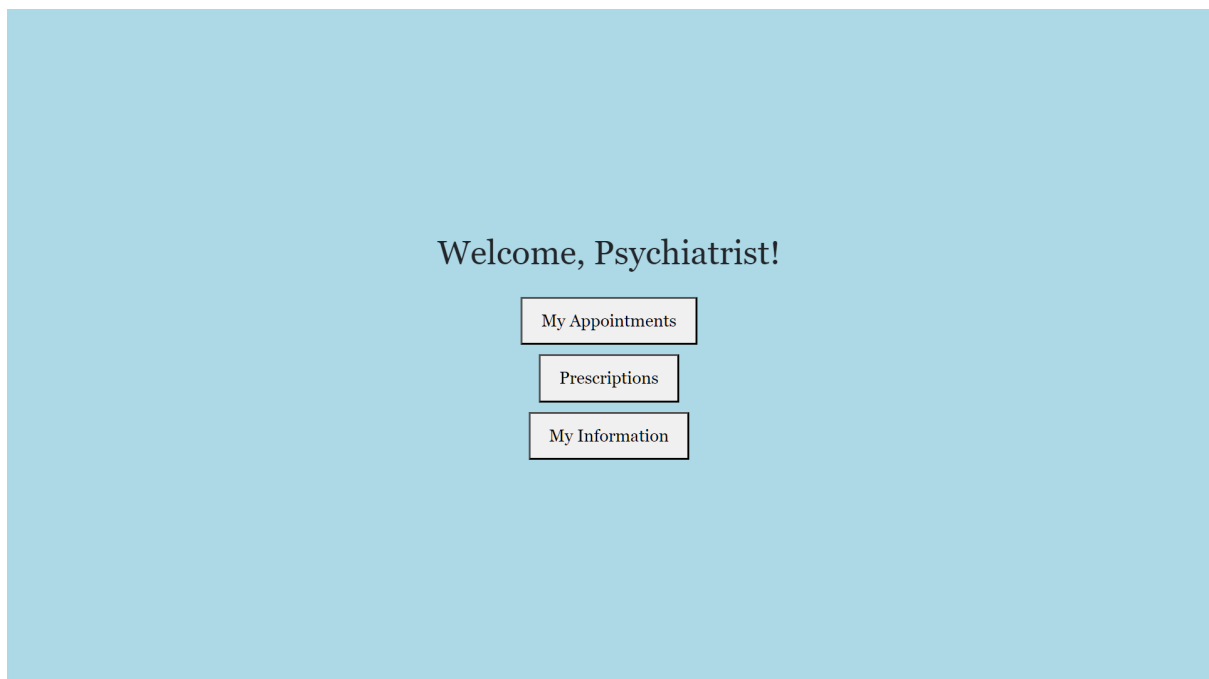
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## 6.2 Psychiatrist



Once logged in, psychiatrist sees a Home page with 4 buttons, My appointments leading to the psychiatrists appointments, Prescription leading to the page where psychiatrist can give prescriptions, and My Information button where psychiatrist can view their own Info and details. Finally, there is a logout button that lets psychiatrist log out of their account.

Back to Home Page

# Prescriptions

Patient ID:

Medicine3:

Medicine1:

Medicine2:

Create Prescription

The prescription page contains a form where it takes the inputs for patient Id and the medicines prescribed to them. The create prescription button will allow the psychiatrist to successfully record the prescription entry in the database. The back button takes the psychiatrist back to their Home page.

Back to Home Page

127.0.0.1:8000 says  
Prescription Created

OK

# Prescriptions

Patient ID:

Medicine3:

Medicine1:

Medicine2:

Create Prescription

[Back to Home Page](#)

## Appointments

Patient ID	Date	Time	Contact	Medical History
1234	12/11/23	12:23PM	01754689	attachment
3456	12/11/23	3:00PM	01754689	attachment

The appointments page features a table of all the remaining appointments of said user. The user can clear an appointment by clicking on it, which will show an alert that the database has updated successfully.

[Back to Home Page](#)

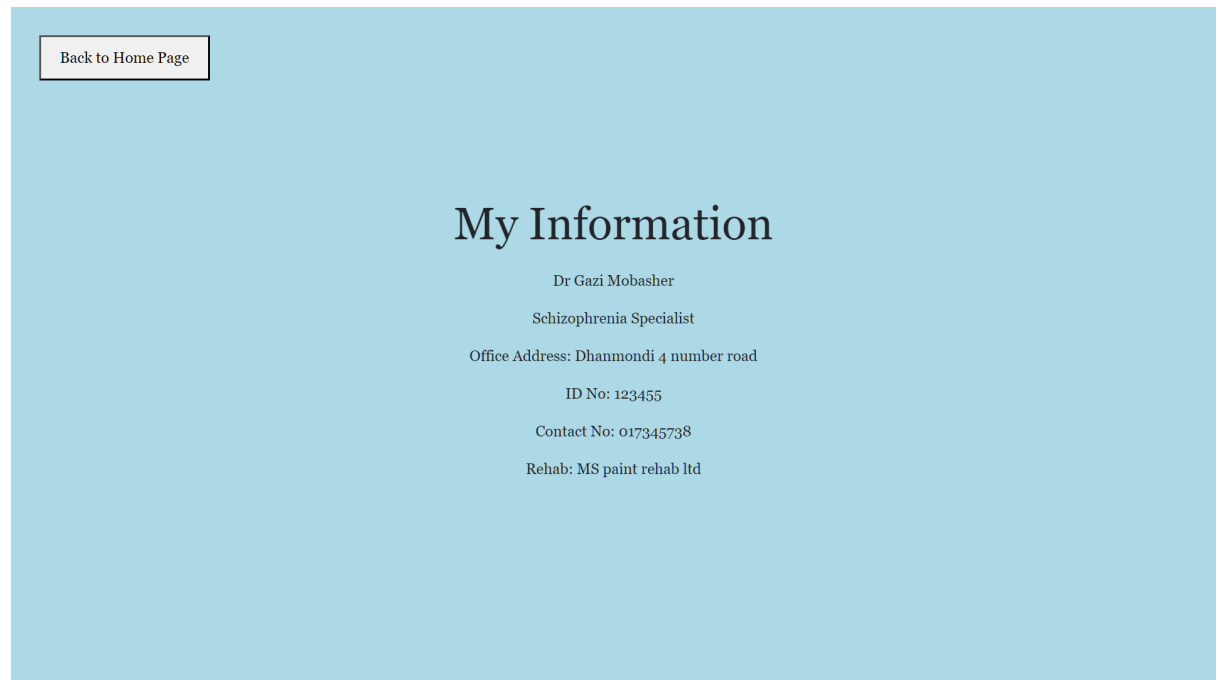
127.0.0.1:8000 says  
Appointment cleared

OK

## Appointments

Patient ID	Date	Time	Contact	Medical History
1234	12/11/23	12:23PM	01754689	attachment
3456	12/11/23	3:00PM	01754689	attachment





Finally, the my information page is a rather simple page, displaying the current details of the Psychiatrist logged in; including their name, speciality, office address, ID number, contact number and place of work.

## 6.3 Rehab Supervisor

### USER DASHBOARD



After the Login process is complete for Rehab supervisors, their dashboard will be loaded as shown in (Photo1). The page has 4 buttons-

“My Information” - clicking this leads to the display of the logged in Supervisor’s information and details. (Photo2)

“Update My Information” - clicking this displays the update information screen, allowing the user to change and update their information in the database.(Photo3)

“Manage Specialist” - clicking this displays the screen where Supervisors are able to either add or remove Specialists.(Photo5)

“View Specialists” - clicking this displays the available Specialists Clients of the website might want to reach out to. (Photo6)

## **MY INFORMATION**

[Back to Home Page](#)

## My Information

Nazifa Chowdhury

Head Supervisor

Office Address: Dhanmondi 4 number road

ID No: 000000

Contact No: 01752549080

Rehab: MS paint rehab ltd

This page contains the Logged in Rehab Supervisor's relevant information such as Name, Title, Office Address, ID, Contact Number and Rehabilitation centre name (Photo2). All this information is accessed from the database. Clicking "Back to Home Page" takes the user back to the user dashboard. (Photo1)

### **UPDATE INFORMATION**

Back to Home Page

## Update Information

Name:

ID No:

Title:

Contact No:

Office Address:

Rehab:

Save Changes

Back to Home Page

127.0.0.1:8000 says  
Changes Saved

OK

## Update Information

Name:

ID No:

Title:

Contact No:

Office Address:

Rehab:

Save Changes

This page contains necessary text fields where the user can input their information and save their changes in the database (Photo3). After clicking “Save Changes” there is an alert notifying the user that the changes have been saved successfully(Photo4).”Clicking “Back to Home Page” takes the user back to the user dashboard. (Photo1)

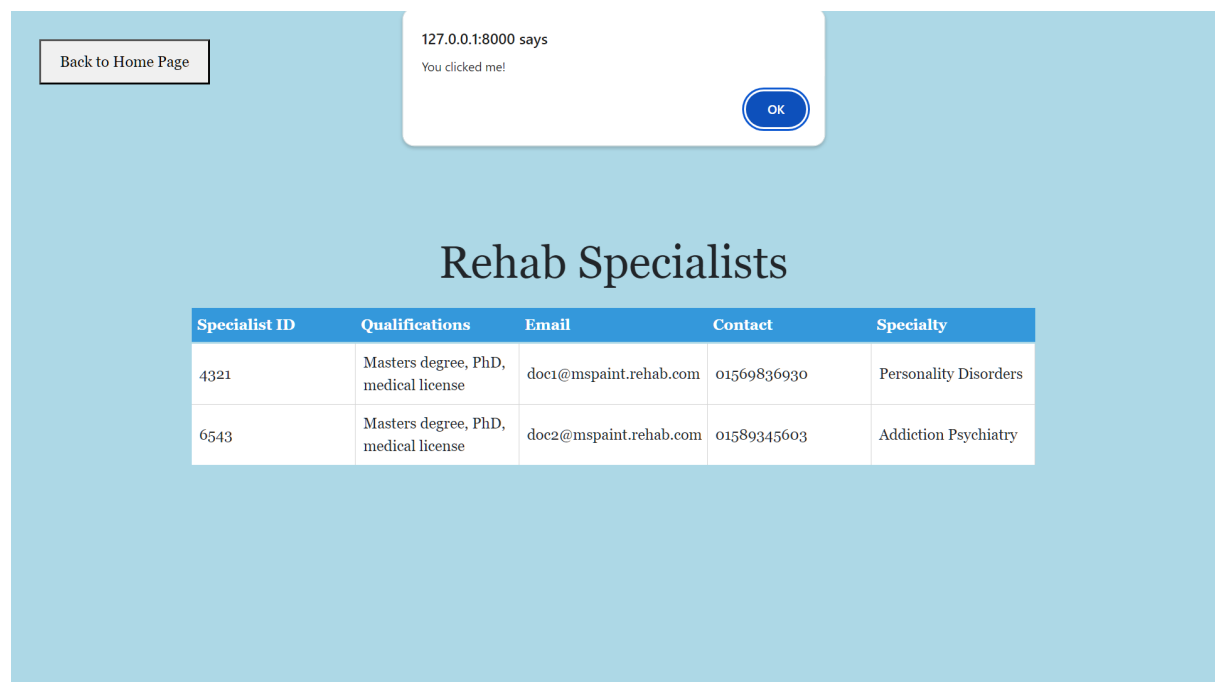
### MANAGE SPECIALISTS



This page contains two buttons, “Add Specialist” and “Remove Specialist”, which the user can click to Add or Remove Specialists registered in the database (Photo5). Clicking “Back to Home Page” takes the user back to the user dashboard. (Photo1)

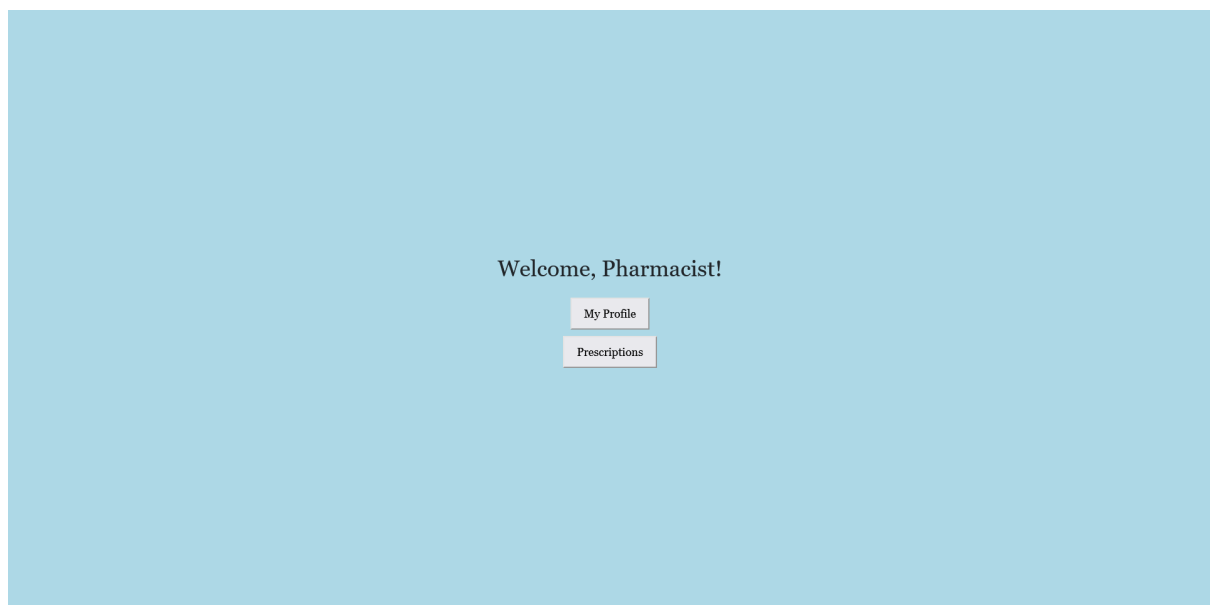
## REHAB SPECIALISTS

Back to Home Page				
Rehab Specialists				
Specialist ID	Qualifications	Email	Contact	Specialty
4321	Masters degree, PhD, medical license	doc1@mspaint.rehab.com	01569836930	Personality Disorders
6543	Masters degree, PhD, medical license	doc2@mspaint.rehab.com	01589345603	Addiction Psychiatry



This page contains a table displaying the details of the existing specialists (therapists, psychiatrists, etc) in the system. The table shows information like specialist ID, Qualifications, Email, Contact information and specialty(Photo6). Users can click the desired specialist row to see more information about them, which for the time being is being shown with an alert notification “You clicked me!” (Photo7). Clicking “Back to Home Page” takes the user back to the user dashboard. (Photo1)

## 6.4 Pharmacist



This is the screen the user will see once logged in. The pharmacist can choose to view their profile to check what information about the pharmacy is up on the website, and if needed they may update their information as well.

The pharmacist can also check prescriptions of patients on the platform that have placed a

purchase request. The prescriptions have been approved by a psychiatrist on the platform that they can choose to dispatch.

Back to Home Page

## My Profile

Pharmacy Name:	City:
<input type="text" value="My Pharmacy"/>	<input type="text" value="Dhaka"/>
Street:	Contact #1:
<input type="text" value="Main Street"/>	<input type="text" value="+8801784553315"/>
Road:	Contact #2:
<input type="text" value="Aftabuddin Ahmed Road"/>	<input type="text" value="+8801784553315"/>
	Contact #3:
	<input type="text" value="+8801784553315"/>

Edit Info

This is the screen the user will see when they want to view or update their information. By default, the existing values of the user's data are loaded and they see a summary of the current state of their profile on the website. The text fields containing the data are also locked and prevent editing, so the user does not accidentally change their information. To update their information, the user must click on the "Edit Info" button, which allows the user to edit the text fields as they please to update all the information that they need to.

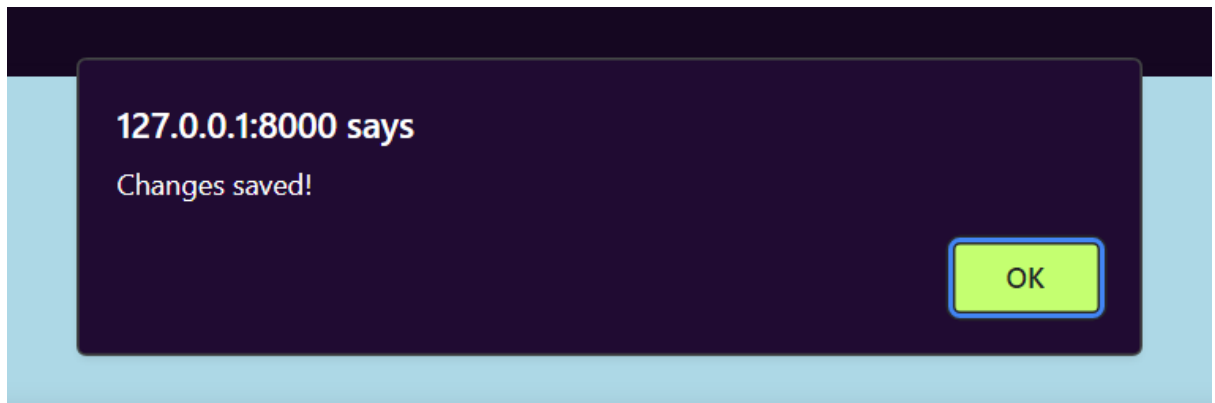
Back to Home Page

## My Profile

Pharmacy Name:	City:
<input type="text" value="My Pharmacy"/>	<input type="text" value="Dhaka"/>
Street:	Contact #1:
<input type="text" value="Main Street"/>	<input type="text" value="+8801784553315"/>
Road:	Contact #2:
<input type="text" value="Aftabuddin Ahmed Road"/>	<input type="text" value="+8801784553315"/>
	Contact #3:
	<input type="text" value="+8801784553315"/>

Edit Info Save Changes

This also shows another button "Save Changes" that the user will click on to complete updating their profile and save the new values to the database. They are also prompted when the changes are saved successfully.

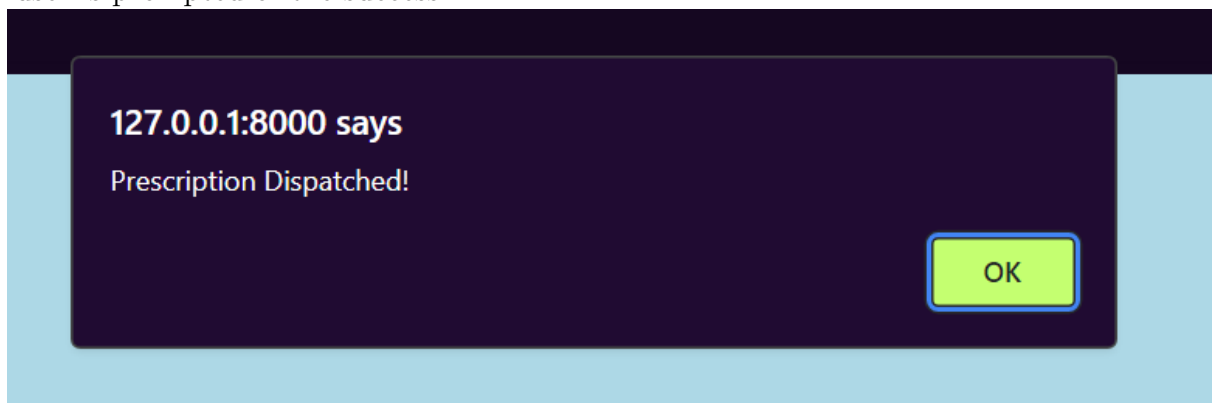


Finally, once done with viewing and/or updating their profile information, the user can select the “Back to Home Page” button to return to Page 1.



In this page the user can see a summary of all the prescriptions that require servicing, including the Prescription ID, Issue Date of the Prescription, Name of the Patient, Name of the Psychiatrist who prescribed the medicine, Contact Information of the Psychiatrist and finally the list of medicines.

The user can select on each row to successfully dispatch the prescriptions, upon which the user is prompted of the success.

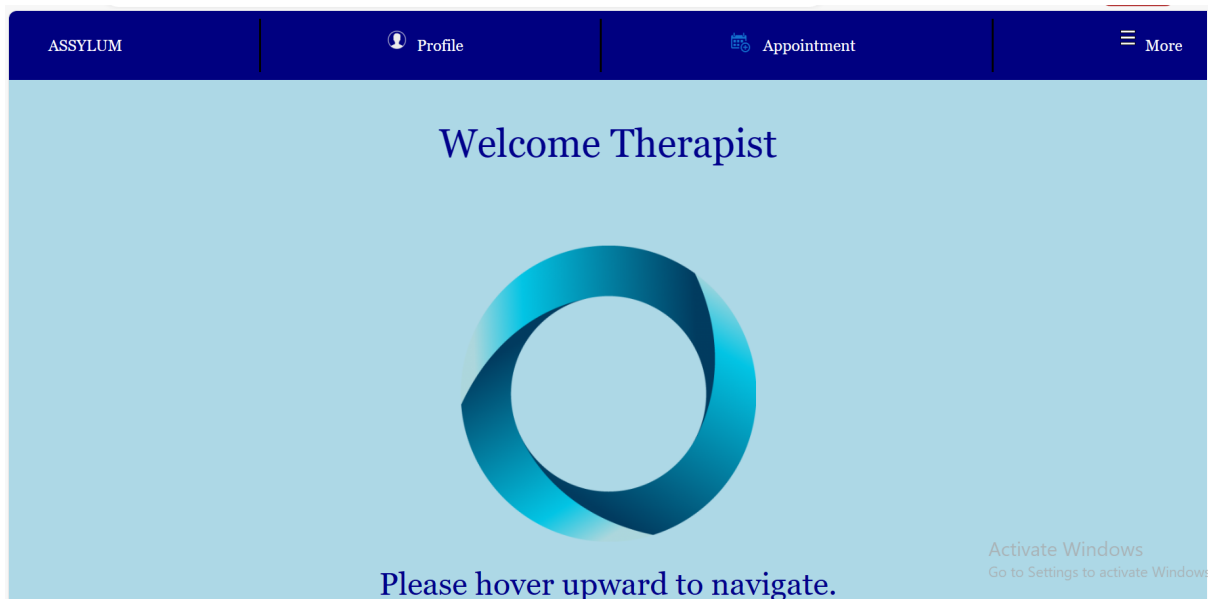


Finally, once done with viewing and/or dispatching prescriptions, the user can select



the “Back to Home Page” button to return to Page 1.

## 6.5 Therapist



The Therapist will see this dashboard once they have logged in; It consists of a navigation bar which directs the user to their respective *Profile* and the Appointment chart they have with patients for the day.

**Shortcomings:** The More section has a dropdown feature which allows the Therapist to log out and see more features. This has not been implemented in the website yet. The ability to see *Notes* for a patient has to be accessed through Appointment and this has to be optimized for direct access. Desired Route: Dashboard - Notes

Current Route: Dashboard - Appointment - Notes



The Therapist will be able to see the appointments they have for the day. The table gives information on the date, time, name, location, contact and condition that determines the importance with which the Therapist can conduct the appointment. The

chart can be edited via the *Edit* button to input a new appointment through a calendar system based on date, day or time. Additionally, the Therapist can go to *Notes* or maneuver back to the Dashboard or *Profile* sections through here.

The calendar system shows in which date of the month, day of the week or time of the day a Therapist would like to make an appointment.

**Shortcomings:** The editing section requires some in-depth details and features through which a Therapist can make sure unique appointments are made on unique dates. Navigation to other places of the page could be made easier by adding those routes, those have not been implemented in the website yet.

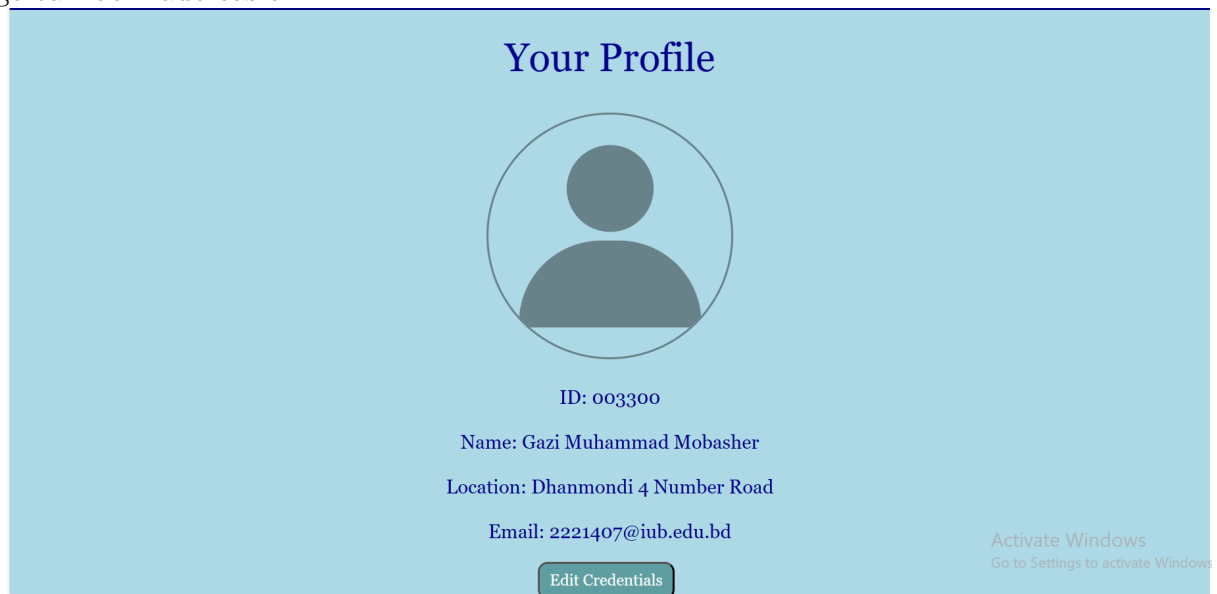
The following page is how a Therapist can write down notes on certain patients' progress, symptoms and condition analysis. Upon completion, notes are saved in a back-end database which can be accessed by the Therapist only. There are also 3 buttons Good, Average and Bad which correspond to the patient condition.

**Shortcomings:** A separate page has to be implemented through which patient details, their condition and their respective notes are tabulated via which a Therapist can easily see patient progress.

The condition determining system can be further optimized by introducing a scale which the Therapist can rate out of 10 or 100 for a certain patient. A patient can perform the rating themselves.

The button which saves Patient notes has not been implemented yet.

Navigation to *Notes*, going back to *Appointment* and navigating elsewhere through this page can be made easier.



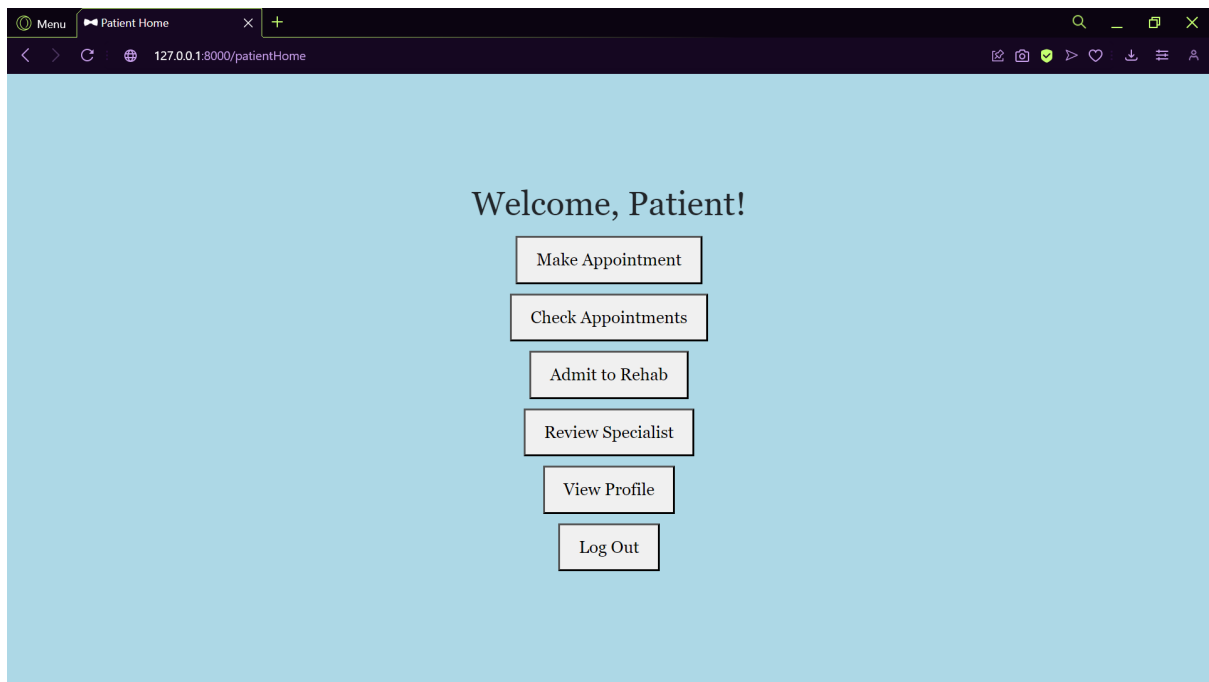
Finally, the Therapist can access their own Profile through the Profile page. They can edit credentials by clicking on the *Edit Credentials* button.

**Shortcomings:** A separate page on inputting or updating new credentials for a Therapist has yet to be implemented.

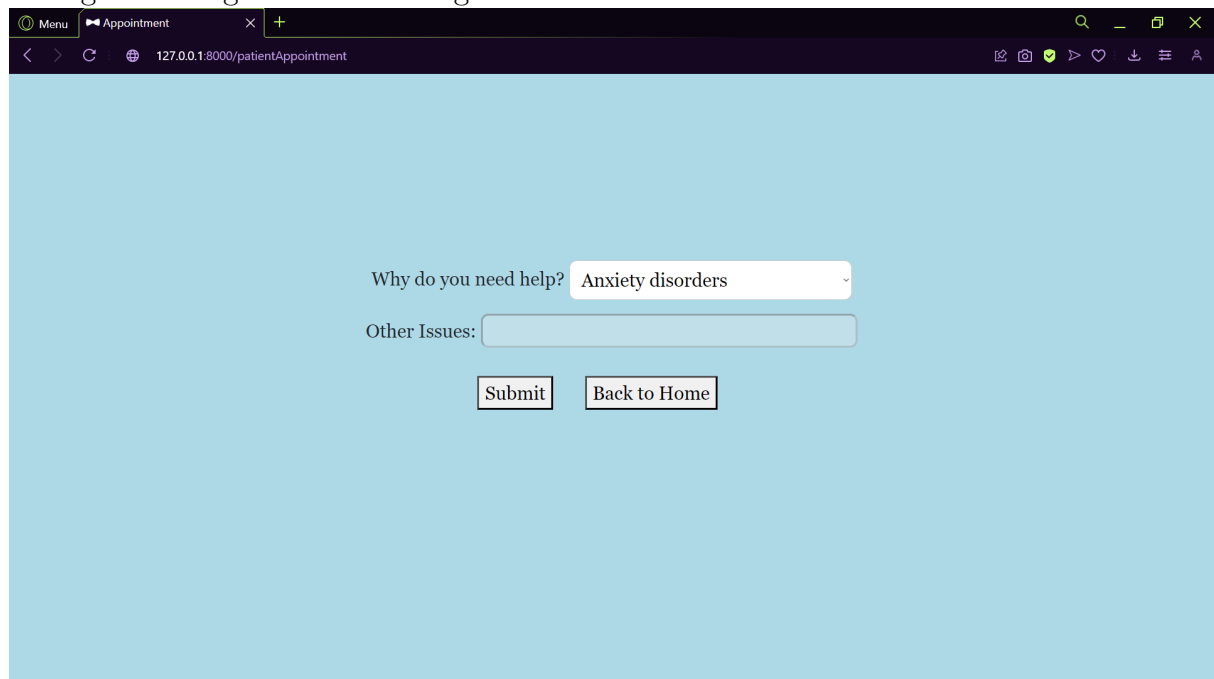
Instead of editing credentials by going to a different page, a Therapist can edit their credentials directly by clicking each feature/credential in each section and update it right there. This can be implemented.

In all cases(in the respective pages) the button labeled *HOME* directs the Therapist to their dashboard.

## 6.6 Patient



Once the patient logs in he is greeted with the patient dashboard. From here the user can go make appointments, check their appointments, admit themselves into a rehab, review the specialist they have been seeing or view and edit their profile. They can also opt to log out and go back to the login screen.



Once the patient clicks “Make Appointment” on their dashboard, they are redirected to this page where they can select what issue they are dealing with. We ask for this information to be able to display to the patient the most relevant specialist they need. They select their issue from a drop-down list shown below. They can also input other issues not included in the list by clicking “Others..” which enables the text box to be editable. Once the user chooses their problem they will click the submit button and be

redirected to the relevant specialist list.

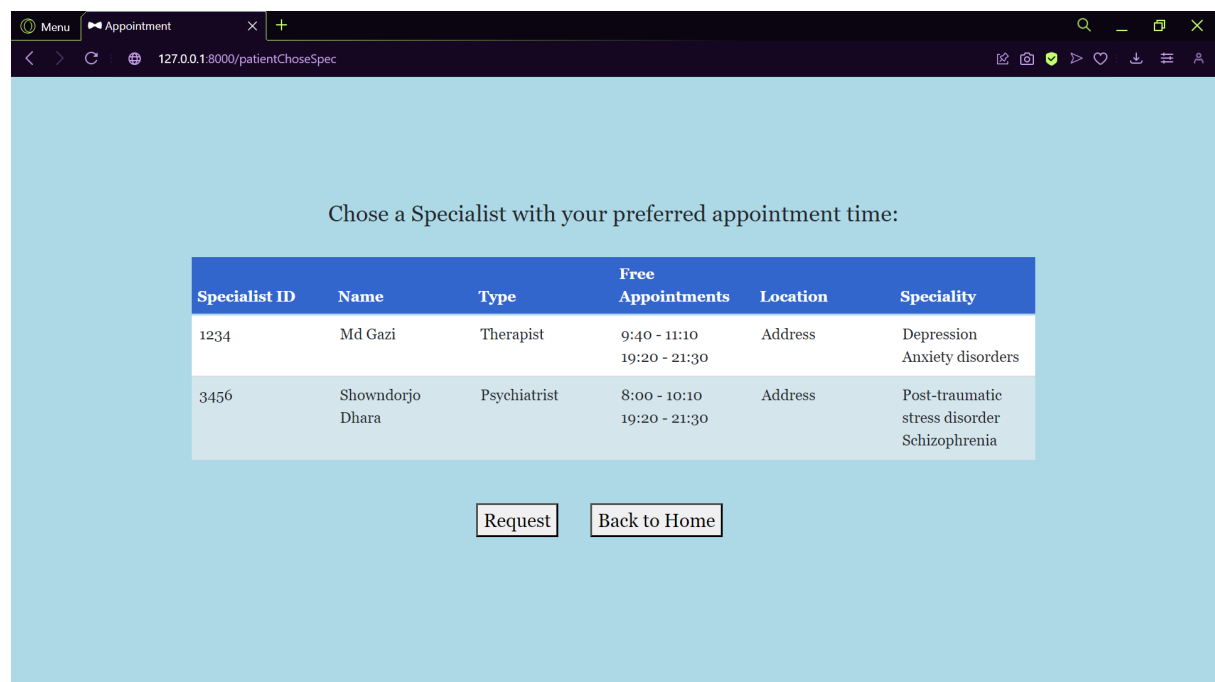
Why do you need help?

Other Issues:

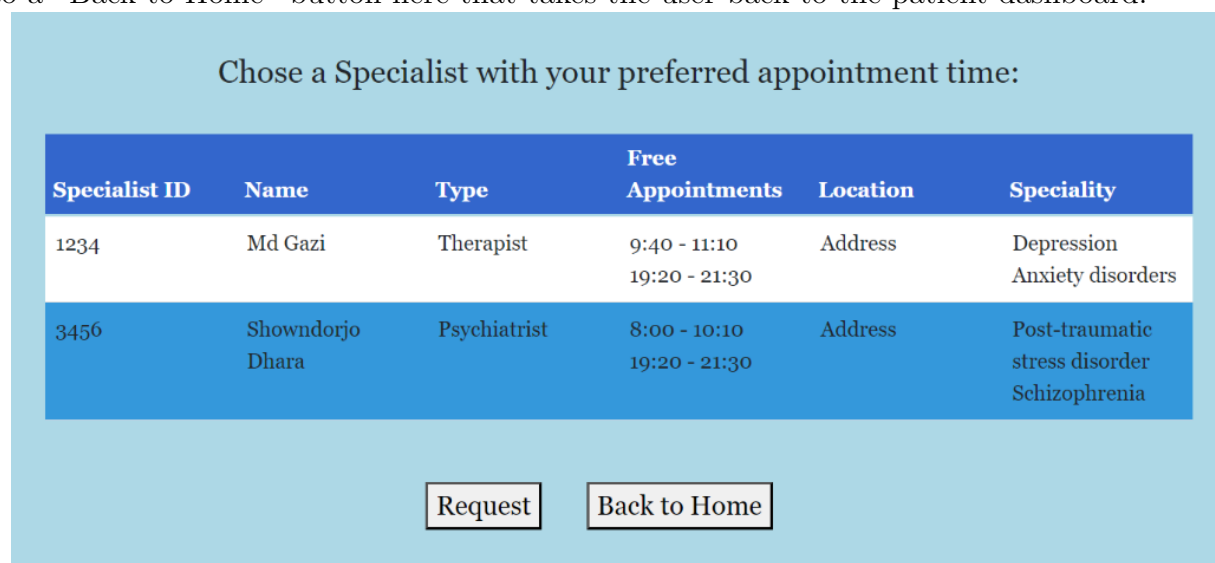
- Anxiety disorders
- Behavioural and emotional disorders in children
- Bipolar affective disorder
- Depression
- Dissociation and dissociative disorders
- Eating disorders
- Obsessive compulsive disorder
- Paranoia
- Post-traumatic stress disorder
- Psychosis
- Schizophrenia
- Other..

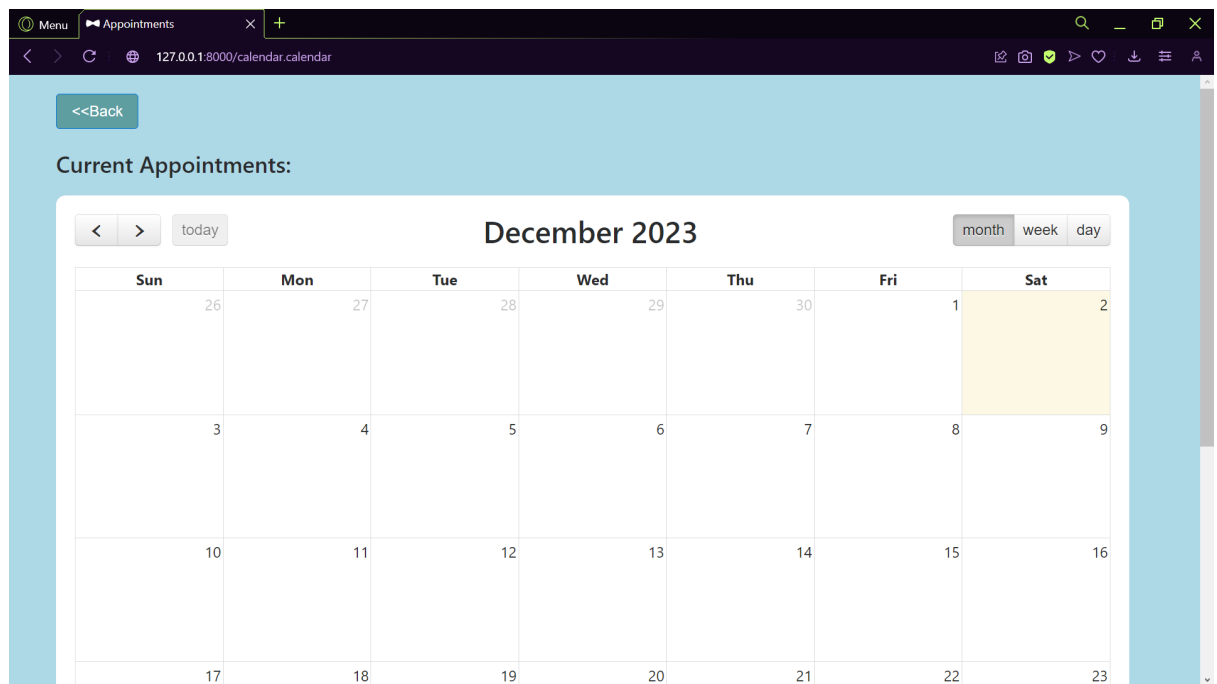
Why do you need help?

Other Issues:

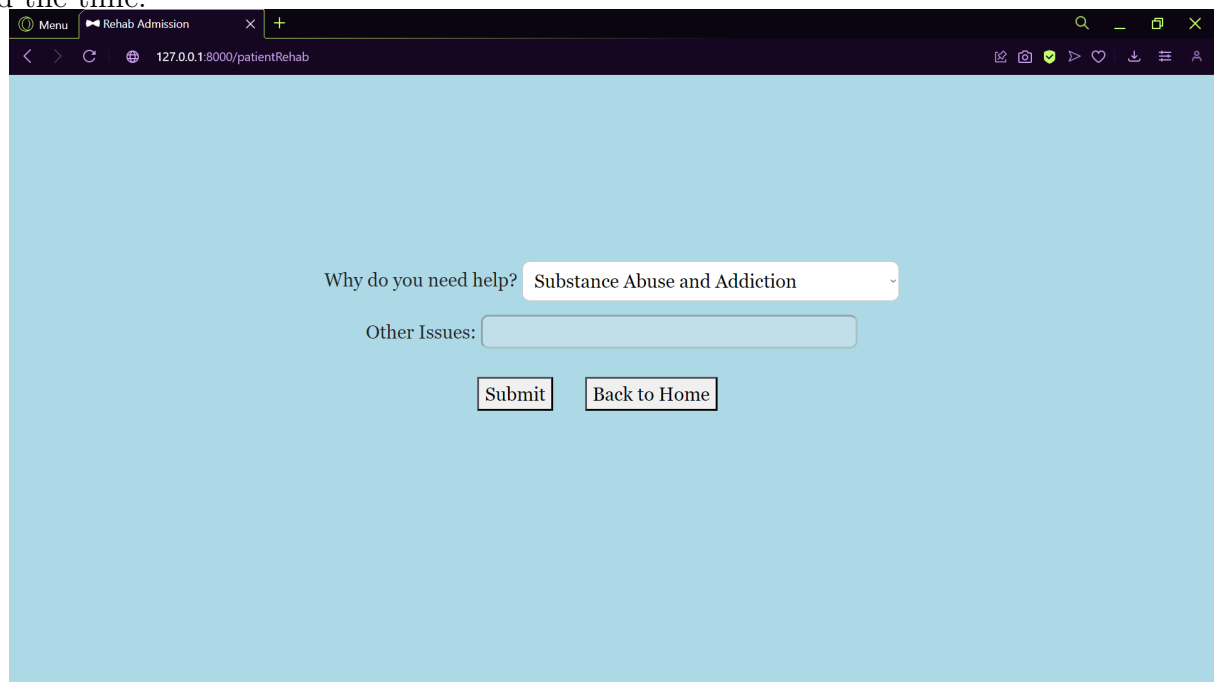


This page displays the list of relevant specialists and shows their available appointment slots. It also displays their office address. The user must select one specialist from the table and click on request to request for the appointment time as shown below. There is also a “Back to Home” button here that takes the user back to the patient dashboard.

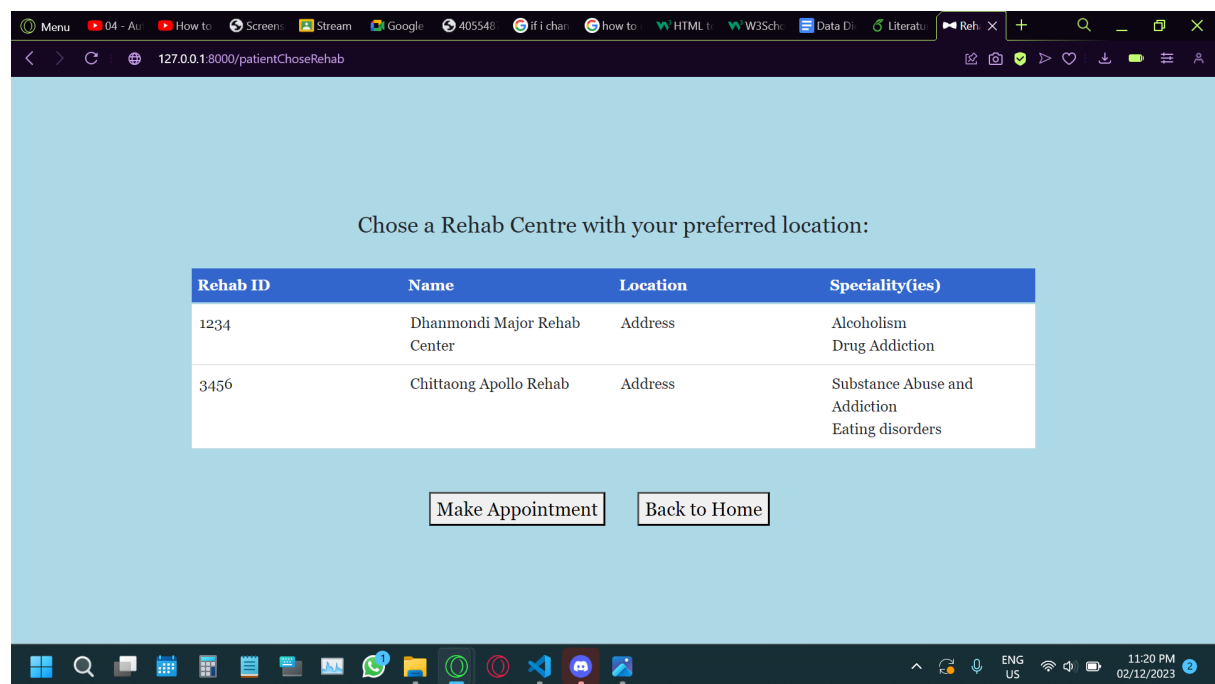




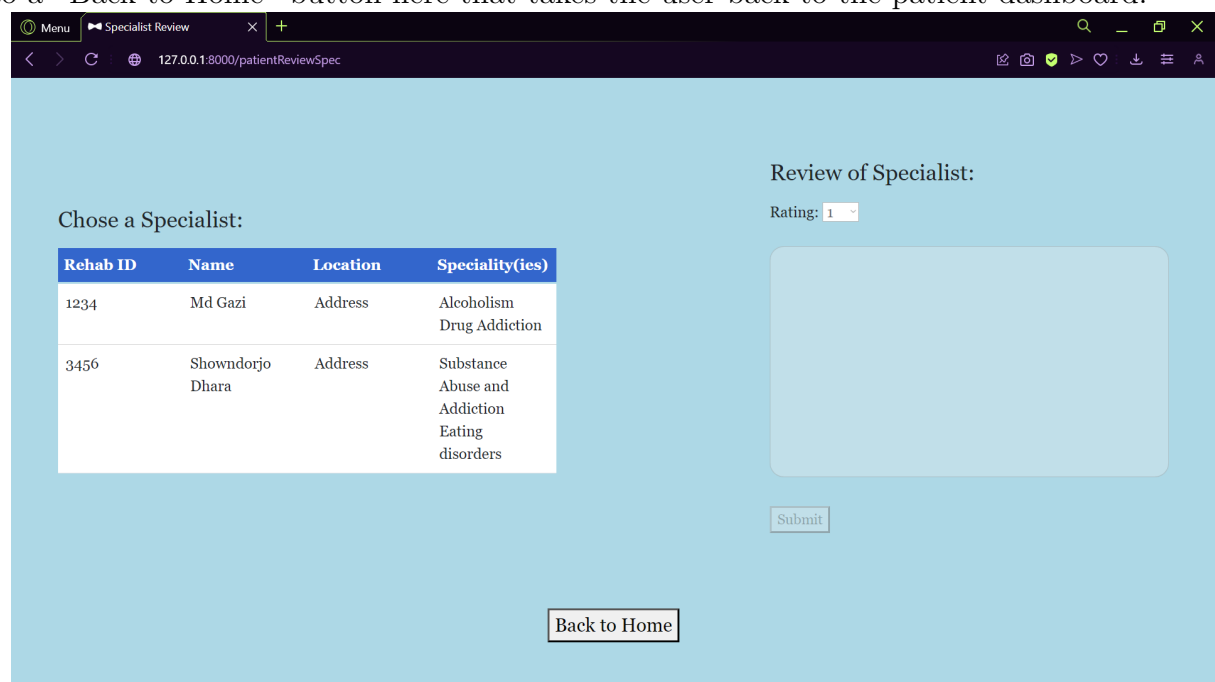
From the patient home if the user clicks on “Check Appointments” they will be redirected to a page with an interactive calendar that displays their upcoming appointments and the time.



If from the patient home the user clicks on “Admit to Rehab” they will be directed to a page where they can select what issue they want to address at the rehab facility. We ask for this information to be able to display to the patient the most relevant rehab facilities they need. They select their issue from a drop-down list shown below. They can also input other issues not included in the list by clicking “Others..” which enables the text box to be editable. It follows a similar function as the previous page where patients had to enter their issue. Once the user chooses their problem they will click the submit button and be redirected to the relevant specialist list.



This page displays the list of relevant rehab centers and shows their locations. The user must select one rehab center from the table and click on request to request for an appointment. It follows a similar functionality as the specialist choosing page. There is also a “Back to Home” button here that takes the user back to the patient dashboard.



From the patient page the user is redirected here if they click on the “Review Specialist” button. This page displays the list of specialists the patient has had appointments with. Once they select a specialist they are able to leave a rating and a review for the specialist as shown below.



Menu Specialist Review

127.0.0.1:8000/patientReviewSpec

Chose a Specialist:

Rehab ID	Name	Location	Speciality(ies)
1234	Md Gazi	Address	Alcoholism Drug Addiction
3456	Showndorjo Dhara	Address	Substance Abuse and Addiction Eating disorders

Review of Specialist:

Rating: 6

He was good.

Submit

Back to Home

Menu My Profile

127.0.0.1:8000/patientProfile

### My Profile

Name: Raihan Ur Rashid

Email: railhan@gmail.com

Date of Birth: 21/12/2000

Contact #1: +8801784553315

Address: Aftabuddin Ahmed Road

Contact #2: +8801784553315

Edit Info Back to Home Page

If the user clicks on the “View Profile” button on the patient dashboard they are redirected to a profile page that shows all the data entered by the users already. Moreover they can also edit this info if they press the “Edit Info” button as shown below. Then they can save changes by pressing the “Save Changes” button.

# My Profile

Name:

Raihan Ur Rashid

Email:

raihan@gmail.com

Date of Birth:

21/12/2000

Contact #1:

+8801784553315

Address:

Aftabuddin Ahmed Road

Contact #2:

+8801784553315

Edit Info

Save Changes

Back to Home Page

## 6.7 NGO

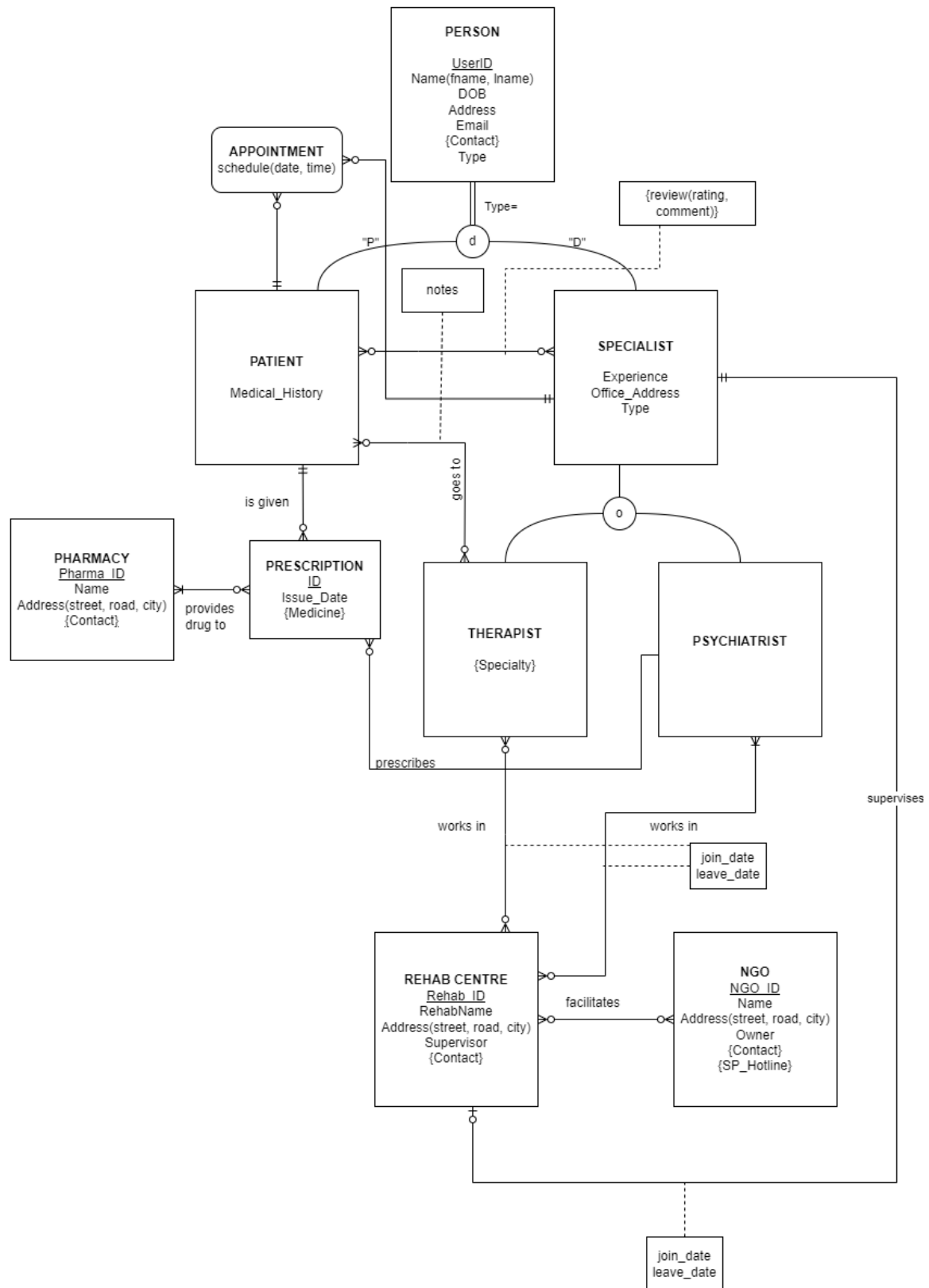
**NGO Rehab Information** All the information regarding the NGO's Rehab Centers are given in a chart-like diagram where you can see their given/current location and the owners name. This is to make it easier to find a rehab center closer to you , making it more convenient and easier to get help fast.

ASSYLUM				
Ngo Rehab Information				
NGO ID	Street	Road	City	Owner
Ng01	StreetNo	RoadNo	CityName	OwnerName
Ng02	StreetNo	RoadNo	CityName	OwnerName
Ng03	StreetNo	RoadNo	CityName	OwnerName
Ng04	StreetNo	RoadNo	CityName	OwnerName
Ng05	StreetNo	RoadNo	CityName	OwnerName

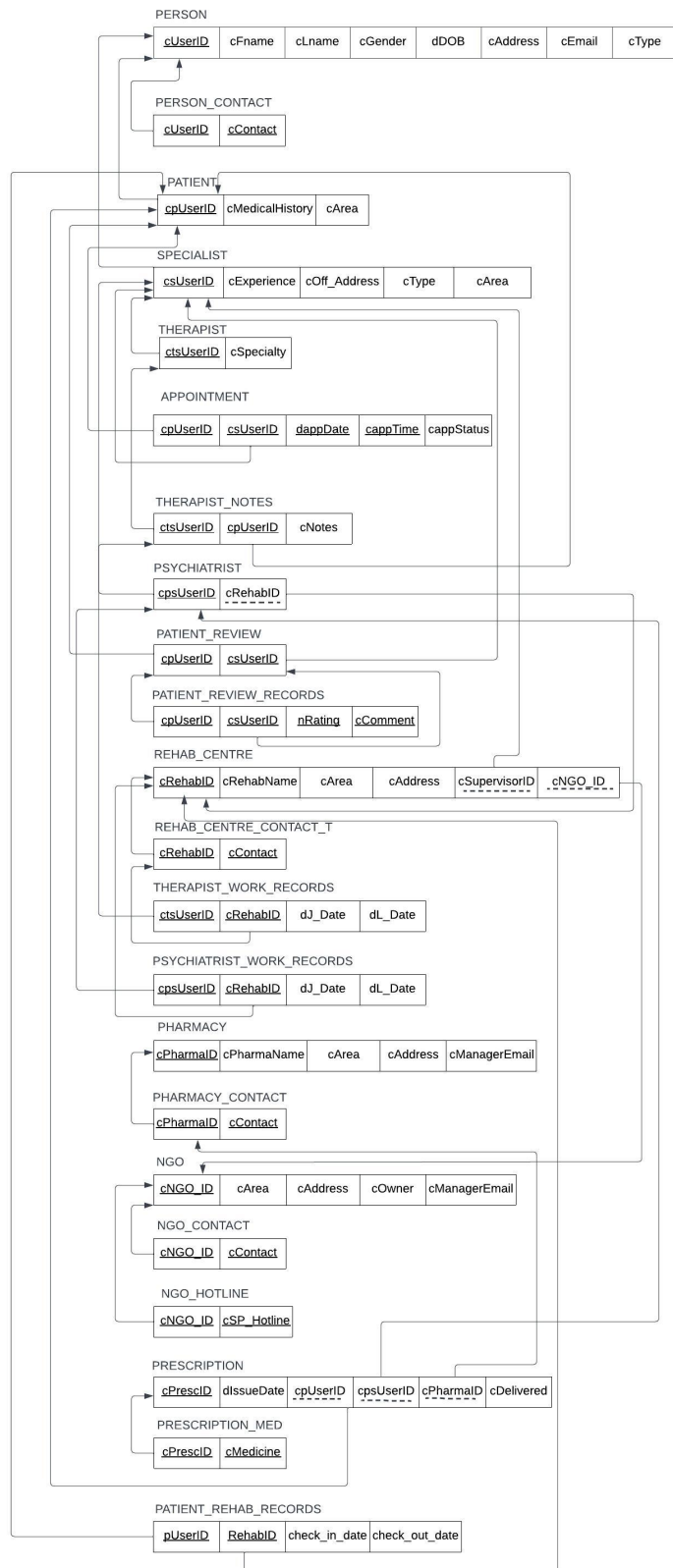
**NGO Info** This page in general is a little more in depth information about the NGO's Rehab Center which contains the contact and the suicide prevention hotline each of which is a phone number, for a NGO's Rehab Center.

Nga Info		
NGOName	Contact	Hotline
Name	Number	Number
Name	Number	Number
Name	Number	Number
Name	Number	Number
Name	Number	Number
Name	Number	Number

## 6.8 Entity Relationship Diagram



## 6.9 Relational Schema



## 6.10 Normalized Schema

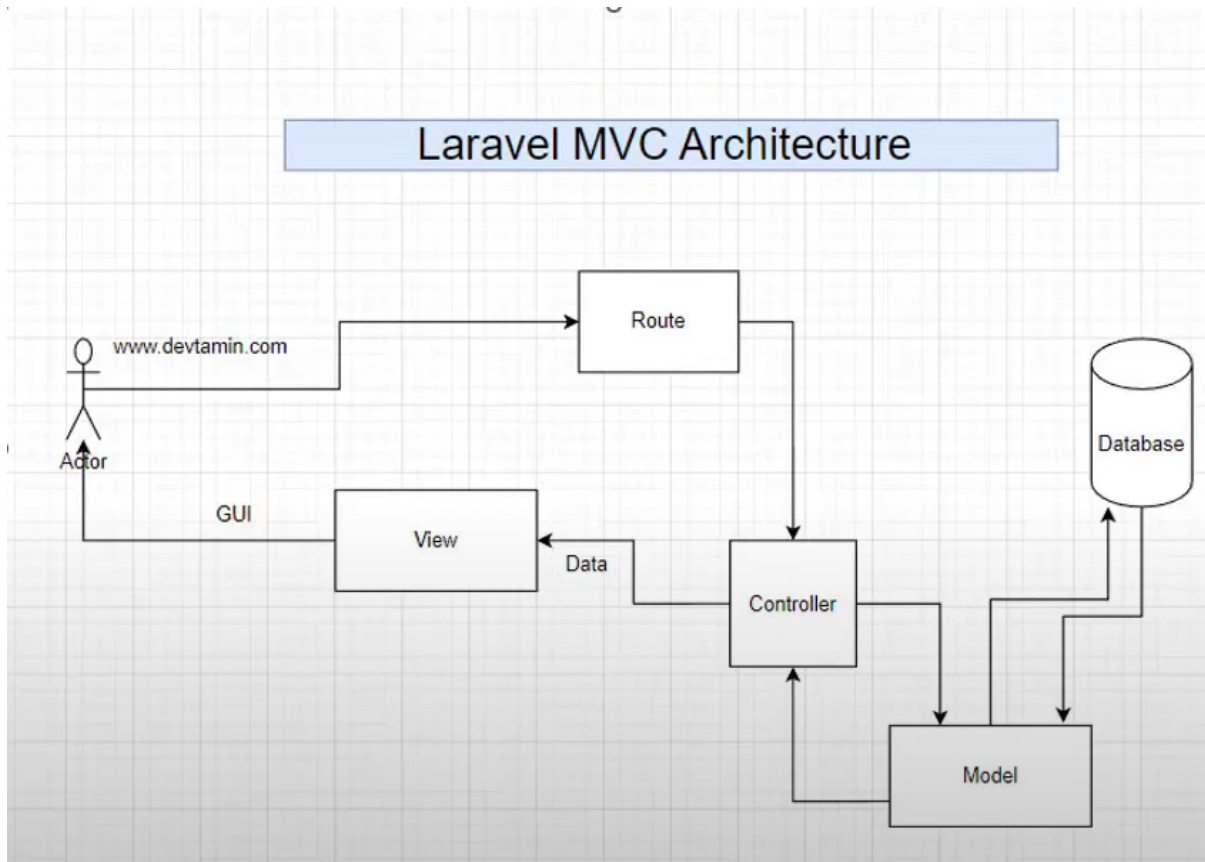
**1NF** All tables are already in first normal form; there are distinct primary keys with no multivalued attributes.

**2NF** All tables are already in second normal form; all attributes are fully dependent on the primary keys of their tables, i.e., no partial dependencies.

**3NF** All tables are already in third normal form; there are no transitive dependencies that have not been isolated.

**BCNF** All tables are already in Boyce-Codd Normal Form as there are no determinants that are not candidate keys.

## 7 Software Architecture



## 8 Result Analysis

The web application that has been developed aims to help a marginalised group of people, namely those who find it difficult to search for help. It was therefore one of the crucial goals to build robust, reliable, fast, and safe software that will perform successfully.

As an example, here is an analysis of one of the features of a Pharmacy registered in the web application. Pharmacies can see prescriptions that have been requested to be serviced, but only specific to their areas. They are able to see relevant information spread across five separate tables, namely “prescription-t”, “patient-t”, “person-t”, “person-contact-t”, and “prescription-med-t”. The following SQL queries run when the implemented system runs in a client environment.

```
SELECT prescription_t.*
```

```
FROM prescription_t INNER JOIN patient_t ON prescription_t.cpUserID = patient_t.cpUserID
WHERE patient_t.cArea = ?;

SELECT *
FROM person_t WHERE cUserID = ?
LIMIT 1;

SELECT *
FROM person_contact_t WHERE cUserID = ?;

SELECT cMedicine
FROM prescription_med_t WHERE prescription_med_t.cPrescID = ? AND
prescription_med_t.cPrescID IS NOT NULL;

-- Execution time: 20.915985107422 milliseconds
```

As is shown, the execution time for such a collection of queries spread across multiple tables is only about 20ms. This shows that our system is well structured, normalised and does indeed benefit from optimisations from database optimisations and parallel execution using MySQL. The user data is also secure as the login credentials are stored on the database after hash encryption, and Laravel's query optimisations prevent vulnerabilities from SQL injection.

The efficient performance of the proposed database management system not only enhances the user experience but also contributes to a reduction in environmental impact and operational costs. A well-optimised system requires fewer resources to function, resulting in a smaller ecological footprint. This alignment with environmentally conscious practices not only reflects a commitment to sustainability but also mitigates potential negative consequences associated with resource-intensive technologies.

As the proposed model scales, the potential societal impact becomes increasingly significant. The system facilitates accessibility to mental healthcare resources for a broader audience, to anyone with access to the Internet. This scalability aligns with the goal of creating an inclusive and widely accessible platform, breaking down barriers to entry for individuals seeking mental health support. By leveraging the power of the internet, the model positions itself as a transformative force, reaching communities that may otherwise face many challenges.

The streamlined performance not only contributes to lower operational costs but also



positions the platform as a cost-effective solution for mental health service providers. This aspect is crucial in sustaining the longevity and accessibility of the proposed model, fostering a system that can potentially be adopted widely within the mental healthcare sector.

In summary, the positive societal impact of the proposed model is two-fold: it not only establishes a more environmentally conscious approach through efficient performance but also serves as a catalyst for increased accessibility to mental healthcare resources. These combined attributes position the model as a promising solution in the effort to make mental health support widely available and economically sustainable.

## 9 Problem Analysis

For those in need of assistance, creating a mental health resource database for Bangladesh that is devoid of essential specifics and has little to no information presents formidable obstacles. By making it more difficult for users to locate local resources, the exclusion of geolocation services further complicates access. Users run the danger of not receiving timely assistance in an emergency when crisis support features are missing. Furthermore, restricting the application to only one language ignores Bangladesh's linguistic variety and might make a lot of people uncomfortable. Not enough educational materials lead to misinformation and stigma, and limiting help to non-anonymous sources could discourage people who are hesitant to disclose who they are. If mental health groups and practitioners are not partnered with, the app becomes isolated and loses credibility and user base. Furthermore, people are unable to encourage one another and share experiences due to the absence of community elements reducing the usefulness of the software. Furthermore, consumers are left without vital support mechanisms in the event of an emergency due to the lack of an urgent appointment system or connections to rescue services. Developing a thorough and easily accessible mental health support system for Bangladesh requires addressing these constraints.

## 10 Conclusion

In summary, the creation and launch of the Mental Health Resources website is a major step in the right direction toward resolving the major issues with mental health accessible. The result of our research is a centralized platform that offers consumers a smooth way to look through, interact with, and take advantage of a wide range of mental health support services.

In the future, initiatives might concentrate on improving the website's usability, integrating cutting-edge technology for tailored mental health advice, and growing the resource library. Furthermore, cooperative initiatives with organizations and mental health specialists could improve the platform even further and guarantee that it continues to adapt to changing mental health requirements.

Finally, we should not undervalue the continued significance of mental health within the larger framework of overall wellbeing. The accomplishment of this initiative is evidence of the transformative potential of technology in fostering constructive social change. We can make a significant contribution to the group effort of creating a society that values and promotes mental health for all by consistently improving and growing programs like the Mental Health Resources website.