FeelsFIX - Online Therapy Booking System

Final Project Report



Sri Lanka Institute of Information Technology IT2080

Information Technology Project

Group ITP_B7_155

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Declaration

This project report is our original work, and the content is not plagiarized from any other resource. References for all the content taken from external resources are correctly cited. To the best of our knowledge, this report does not contain any material published or written by third parties, except as acknowledged in the text.

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Abstract

The FeelsFix Online Therapy Booking System was developed to improve services, convenience, and the management of mental health care through a digitally based centralized platform. Methods of booking traditional therapy are generally paper based, limited client tracking and uncoordinated communication between clients and therapists. To combat these problems, we will meet the need by providing a user friendly and holistically featured system for which users may programmatically set up therapy sessions, get wellness plans subscribes, and take part in workshops as well consume carefully curated mental health content.

Client, Therapist and admin-three kinds of users with different access and functionality are built by the same system but in entirely separate modules. Important features: session booking, secure online payment (uploading bank slip), feedback management, blog sharing with moderation and also report generating. Developed with next generation web tech and a proper code development process, FeelsFix is made for simple use, security of data and scalability. This report describes the problem scenario, system architecture, implementation approach and evaluation measures. It becomes thus, the trustworthy and complete key to effective mental wellness administration in digital space.

Acknowledgement

We would like to express our sincere gratitude to everyone who contributed to the successful completion of this FeelsFIX Online Therapy Booking System project.

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We also extend our appreciation to the faculty and staff of the Faculty of Computing, whose teachings and resources provided a strong foundation for our work.

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List of Abbreviations

Table 1-List of Abbreviation

Abbreviation	Description
MERN	MongoDB, Express, React Js, Node Js
ER	Entity Relationship Diagram
DBMS	Database management System
UI	User Interface
SD	Sequence Diagram
SDLC	Software Development Life Cycle

Chapter 01- Introduction

Background

Company Background

Serenity Well-being Center is an organization dedicated to making people better in every way possible - physical, mental, and emotional. They offer one-on-one therapy, group therapy, and well-being workshops that are all aimed at helping people live a healthier and more balanced life. Their clients can easily book appointments through phone calls and WhatsApp, and their services are provided by licensed and experienced professionals.

Currently, everything is done manually from organizing to keeping customer records, consuming a lot of time and even creating mistakes at times. Payment is made in the form of bank transactions or cash as there is no payment system over the web. They rely on social networking and word of mouth to reach new customers and do not have a systematic process to remain connected with them in the long term. Despite these difficulties, their aim is to provide a friendly environment in which individuals feel encouraged on their path towards improved well-being.

FeelsFIX - Online Therapy Booking System

The FeelsFix Online Therapy Booking System is designed to manage and streamline the daily operations and special activities carried out within the Serenity Well-being Center. The platform supports the entire therapy process, from booking appointments to managing therapist availability, ensuring smooth and efficient mental health service delivery. In addition to individual sessions, the system facilitates the coordination of group therapies, workshops, and wellness events.

FeelsFix also maintains detailed records of clients, therapists, payments and feedback. Currently, most of these tasks are handled manually through phone calls, messaging apps, and spreadsheets, which often leads to delays and errors. This system aims to automate key areas of the process and bring all operations into a single, centralized platform. By doing so, FeelsFix enhances the overall experience for both clients and therapists, making mental health support more accessible, organized, and secure.

Problem and Motivation

Problem

• Appointment Management Problems

Schedule and bookings are booked manually through calls and WhatsApp, which is a hassle to manage and book sessions in an organized way. It can lead to conflicts in bookings, no-shows, and delayed response to clients' enquiries, which affects the client experience accordingly.

• Client Record Management Challenges

Without a structured system for maintaining client files, therapists must manually track treatment history and progress notes. It is difficult to provide seamless and individualized care, subjecting it to missing or lost information.

• Payment Processing Challenges

Payments are made manually by bank transfer or cash, and this creates risks of delay, error, and lower transparency. Clients lack easy ways of monitoring their payments, and therapists spend more time verifying transactions instead of focusing on their core services.

Limited Accessibility and Availability

Since there is no computerized scheduling software, clients would not automatically be notified of therapists' schedules and thus would end up disappointed that they can't book appointments at their preferred times. Additionally, without effective scheduling management, therapists would struggle to maintain an appropriate balance at work.

•Absence of Client Involvement and Feedback Channels

There is no structured mechanism for gathering client feedback, and therefore measuring satisfaction and improving services becomes difficult. There is no holistic approach to client engagement, follow-up, or loyalty schemes to build long-term relationships as well.

Motivation

Imagine a world in which access to mental health care is as simple and comforting as a therapy session itself. Our site leverages the latest technology to make scheduling therapy as simple as possible, so that therapists and clients alike can focus on what matters most—healing and wellness. By simplifying appointment scheduling, record-keeping, and client communication, we're changing the way mental health services are accessed, making it more efficient, accessible, and less burdensome.

Solutions:

- Automated booking for therapy sessions and workshops reduces manual errors and saves time.
- Data validation and logical constraints ensure accuracy and system reliability.
- Real-time access to appointments, booking status, and payments for all user roles.
- Secure payment via bank slip uploads with admin approval, eliminating physical transactions.
- Structured feedback collection helps therapists improve based on client experiences.
- Inquiry system allows users to report issues like failed uploads or appointment errors.
- Blog section enables content sharing and interaction, boosting engagement and awareness.
- Admin dashboard manages users, therapists, and reported content efficiently.
- Notifications and reminders reduce no-shows and keep users informed.

Benefits:

- Centralized Platform: Streamlines all therapy-related operations in one place, improving coordination between therapists, clients, and administrators.
- Automated Scheduling of Appointments: Minimizes the administrative load for therapists & also schedule conflicts in real-time with availability.
- Enhanced Client Experience: Clients can check session availability, therapy history and see their on progress.
- Secure Bank Transfer & Payment Slip Upload: Clients pay via bank transfer and upload the payment slip on the platform. Finally, admins check the payment slips to guarantee a safe and transparent workshop or therapy appointment registration.

- Feedback Collection: Therapists receive structured feedback from clients, enabling service improvement and personalized care.
- Analytics & Reporting: Insight enabled data to make better decisions on workload management, decision making and business growth strategies.
- Improved Therapist-Client Communication: A supportive and transparent system fosters trust and better mental health outcomes.
- Secure Bank Transfer & Slip Upload: Clients make payments via bank transfer and upload the payment slip through the platform. Admins then verify the slips, ensuring a secure and transparent registration process for workshops and therapy appointments.
- User Inquiry Support: Clients can easily submit inquiries related to website issues such as payment slip uploads or appointment visibility, ensuring quick problem resolution and enhanced user satisfaction.

Literature Review

Introduction:

Mental health is a crucial aspect of modern life, affecting individuals across all age groups. However, stigma, accessibility issues, and affordability continue to prevent many from seeking professional help. The rise of digital technology has paved the way for online therapy platforms, offering individuals a **secure**, **flexible**, **and convenient** method to receive mental health support. By analyzing and referring to existing **online therapy booking systems**, we can identify both **advantages and drawbacks** of their implementations. This comparative analysis enables us to design a system that caters to user needs more effectively while addressing common challenges faced by similar platforms.

Examining Related Solutions:

a. BetterHelp - Online Therapy Platform

BetterHelp connects users with licensed therapists through a variety of communication methods.

Advantages:

- Offers a wide network of therapists based on user preferences.
- Flexible communication options: text, video, and phone sessions.
- Subscription-based pricing for consistent access.

Cons:

- Delayed therapist responses in text-based communication.
- Initial therapist matching may be inaccurate.
- Lacks support for crisis or emergency mental health cases.

b. Talkspace - Therapy via Messaging and Video

Talkspace provides users with therapy plans that include unlimited messaging and video sessions.

Advantages:

- HIPAA-compliant platform ensuring data security.
- Offers therapy for individuals and couples.
- Asynchronous messaging support throughout the day.

Cons:

- High cost compared to traditional therapy.
- No trial period to test the service before committing.
- Therapist responses are not always immediate, reducing real-time support.

c. Amwell Behavioral Health - Telemedicine - Based Therapy

Amwell integrates behavioral therapy with general telehealth services.

Advantages:

- Includes medication management by psychiatrists.
- Easy-to-use system for appointment scheduling.
- Secure payment and patient data management.

Cons:

- Limited therapist availability outside business hours.
- Costlier than other platforms, reducing accessibility.
- More focused on integration with medical services than mental health depth.

Insights and Improvements for FeelsFix

Based on these comparisons, FeelsFix aims to stand out by addressing the above limitations with such as:

- Real-time therapist availability for instant session booking.
- Per-session payments with bank slip upload—no subscription required.
- Fast admin approval and tracking of payment confirmation.
- Dedicated inquiry system for user-reported issues (e.g., upload errors, appointment visibility).
- Strong user feedback mechanisms to continuously improve service quality.
- Inclusive workshop and content sections for broader wellness engagement.
- Admin moderation of all content to maintain professionalism and safety.

Aim and Objectives

Aim:

The goal of the Online Therapy Booking System is to develop an easy-to-use and efficient web portal that facilitates simple therapy appointment scheduling, therapist-client interaction, secure payments, and wellness content sharing. The system aims to expand access to mental health care, improve scheduling efficiency, ensure secure transactions, and provide an integrated wellness experience through workshops and self-help resources. Additionally, the system provides administrators with reporting and analytics tools to monitor activity on the platform and user engagement.

Objectives:

- Build a centralized platform for managing therapist-client interactions, session records, and wellness content.
- Automate appointment booking, session reminders, and payment verification through bank slip uploads to reduce manual workload and errors.
- Implement role-based user management for clients, therapists, and admins with profile control and access restrictions.
- Enable secure storage and tracking of payment history and transaction records with downloadable receipts.
- Provide tools for therapists to manage availability, schedule workshops, and distribute self-care resources and mindfulness content.

• Offer user-generated wellness content features with admin moderation, feedback collection, and engagement tracking for continuous improvement.

Solution Overview

FeelsFix Online Therapy Booking System is a centralized digital replacement platform to consolidate the existing disparate and manual mental health services management. Built using contemporary web technologies and deployed upon a robust secure cloud infrastructure, the system allows for client-therapist matching, appointments management payments, managing wellness content to be done in one accessible platform.

The system is built around five main interlocking domains that comprise the core functional abilities of therapy:

- 1. User Management
- 2. Appointment Management
- 3. Payment Management
- 4. Wellness Content & Feedback Management
- 5. Workshop Management

FeelsFix combines all these components which help to minimize administrative complexity, increases the visibility of services and does a great job in terms of customer experience. The platform enables both therapists and clients by live tracking of session, auto reminders, structured feedback collection, moderation to keep mental education quality and contemporary.

An important aspect being Inquiry System wherein the users can report directly to an admin. User can give an Inquiry about the failed uploads or missed bookings and the issue resolved by admin team ASAP.

Also, the system consists of Admin Dashboard built in real-time for data availability and reporting that makes it simple for administrators to keep track of the platform activity, user engagement or financial transactions in the system. Strong data validation and role-based access control, FeelsFix secures data at rest & in transit, protects confidentiality and offers user satisfaction to boundary every interaction.

The platform also features a secure bank slip upload system for payments, replacing traditional subscriptions with a simple, verifiable process.

The therapist interface offers tools to:

- Manage session availability
- View client feedback
- Publish blog content
- Organize workshops and group events

Through a unified and intelligent design, FeelsFix builds a trustworthy, efficient, and accessible system that supports mental well-being for all its users.

Methodology

Methods: Agile Software Engineering methodology

For FeelsFix, we follow an Agile Software Engineering path to deliver a working system rapidly that meets evolving user needs. Agile focuses on iterative development, continuous feedback, and close collaboration with stakeholders. By releasing improved versions incrementally, we can react to changes promptly and keep our online therapy platform aligned with user expectations. In our project, we follow the Kanban practice to visualize work items, maintain flexibility, and encourage continuous communication between developers, therapists, and administrators.

Reasons for choosing Agile:

- Better customer satisfaction via feedback cycles.
- Better cooperation and transparency.
- Fewer opportunities for bugs and cost overruns.
- Flexibility to react to evolving requirements.
- Better improvement through more regular evaluation.

Alternatives:

- Waterfall Development
- Lean Software Development
- Rapid Application Development (RAD)
- DevOps Methodology

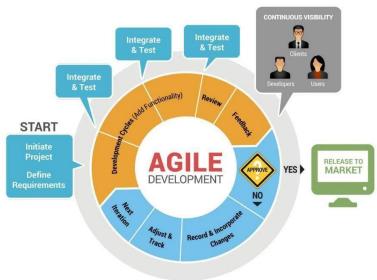


Figure 1.1

Design Methods: Component-Based Design

Because we operate to a component-based design theory, FeelsFix can be divided into more manageable, modular parts. This makes it possible for rapid development, easy flexibility, and simple maintenance. Our development teams can work together because the design methodology's use of standard parts also makes the system's user interface uniform. Additionally, this facilitates the testing and integration of new procedures such as sharing wellness content, arranging appointments, and making payments.

Reasons for choosing Component-Based Design:

- encourages code and user interface elements to be reused.
- gives you more freedom to alter in the future.
- simplifies debugging and maintenance.
- makes scalable growth possible.
- encourages cooperation.

Alternatives:

- Object-Oriented Design
- Structured Design
- Data-Driven Design
- Service-Oriented Architecture
- Model-Driven Design

Development Tools and Technologies

For developing FeelsFix, we leverage modern, open-source tools that facilitate collaborative development and efficient coding practices:

Diagramming:

•Draw.io: - A free, user-friendly tool for creating professional diagrams and flowcharts.

Wireframing:

• MockFlow: - A web-based design tool that offers a range of templates and a user-friendly interface for rapid wireframing.

Code Editor:

•Visual Studio Code: - A powerful, multi-language code editor with extensive extension support and an intuitive interface.

Technology Used:

- o MERN Stack:
 - MongoDB: NoSQL database for flexible data storage.
 - **Express.js:** Lightweight framework for building RESTful APIs.
 - **React.js:** Component-based library for building interactive user interfaces.
 - Node.js: Server-side JavaScript runtime for scalable backend development.



Figure 2

Testing Methods

Robust testing is crucial for ensuring the reliability of FeelsFix. We primarily use:

• Postman

 A versatile tool for API development and testing, enabling us to create, send, and manage API requests easily.

• Alternatives:

- o cURL
- o Swagger
- o Insomnia
- o SoapUI
- o PAW

Integration Methods

For version control and integration, we utilize:

• GitHub:

 A widely used platform that offers a user-friendly interface for managing code repositories, collaborative development, and integration with CI/CD tools. GitHub supports both private and public repositories and integrates seamlessly with other tools like Jenkins and Visual Studio Code.

• Alternatives:

- o GitLab
- o Bitbucket
- o CircleCI
- o CloudBees
- o Apache Subversion

Structure of the Report

This report is organized to provide a comprehensive overview of the Estate Management System, beginning with the problem definition and motivation behind the project. It then proceeds to cover the project objectives and scope, followed by a review of the current system and the limitations it presents. The design and implementation of the proposed system are discussed in detail, including system architecture, functional and non-functional requirements, and user interface design. The report further elaborates on the technologies used, the testing and validation process, and the final outcomes. Finally, the report concludes with a summary of findings, challenges faced, and suggestions for future improvements. This structure ensures a logical flow and facilitates a clear understanding of each phase of the system development.

Git Repo

https://github.com/PasinduLF/FeelsFIX

Chapter 02 – Requirements

Stakeholder Analysis

- 1. Core System
 - FeelsFix Online Therapy Booking System, the main platform responsible for managing therapy sessions, user accounts, payments, contact moderation and communication.
- Primary Users
 - Users (Clients)
 - Search, book, and attend therapy sessions.
 - Manage personal profiles, payments, and feedback.
 - Access mental health content and resources.
 - Therapists
 - Manage session availability and conduct therapy via video, chat or audio.
 - Access client history, update session notes, and track earnings.
 - Respond to client messages and reviews.
- 3. Secondary Users
 - Admins
 - Oversee platform operations and user management.
 - Moderate content, handle reports, and maintain platform security.
 - Generate financial, user activity, and compliance reports.
 - Payment Providers
 - Process transactions securely between users and therapists.
 - Support refunds and payout schedule.
- 4. External Stakeholders
 - Regulatory Bodies
 - Ensure platform compliance with data protection law.
 - Monitor ethical practices and service quality standards in mental health delivery.
 - Oversee licensing and verification of therapists.

Requirement Analysis

Functional Requirements

- 1. Admin
- User Management
 - View/Create/Update/Delete user accounts (Clients, Therapists)
 - Suspend or block inappropriate users
- Content Moderation
 - Monitor, Flag, or Delete harmful posts and comments
- Report Management
 - Generate reports by category
 - Select time range: weekly/monthly/custom
- Payment Management
 - View/manage transactions, refunds, therapist payouts
- Session Management
 - View and track therapy sessions
- Compliance Management
 - Verify therapist licenses
 - Ensure data protection compliance
- 2. Therapist
- Client & Session Management
 - View client list and progress
 - Schedule/manage sessions
 - Record session notes
- Session Conducting
 - Conduct sessions via video/audio/chat
 - Access client History
- Payment Tracking
 - View earrings and payout history
 - Request payouts
- Availability Management
 - Set/Update available session times
- Feedback Monitoring
 - Receive and review client feedback and ratings

3. User

- Profile Management
 - Create/Update profile
 - View of the history of therapy
- Session Booking
 - Search for therapists and book sessions
 - Cancel/Reschedule appointments
- Payment Management
 - Pay via secure methods (bank slip upload)
 - View payment history and invoice
- Feedback & Report
 - Rate and review therapists
 - Report on issues with sessions
- Privacy & Security
 - Manage privacy settings
 - View/Delete personal data

Non-Functional Requirements

- 1. Admin
 - Usability: Intuitive dashboard for managing users, reports, and content.
 - Performance: Handles high admin traffic with real-time updates.
 - Security: Role-based access and data encryption (HIPAA/GDPR compliant).
 - Monitoring: Real-time system alerts for downtime or issues.

2. Therapist

- Efficiency: Fast session scheduling and client access.
- Data Protection: Only assigned therapists can access client records.
- Accessibility: Fully responsive on mobile, tablet, and desktop.
- Security: Auto-logout after inactivity for client safety.

3. User

- Scalability: The system must support future expansion.
- Compliance: Must adhere to government labor and agricultural regulations.
- 4. General System NFRs
 - Scalability: Supports growing user base without performance drops.
 - Compliance: Adheres to healthcare and data privacy laws.

Requirements Modeling

Use case Scenarios

Table 2: Use case scenario for creating an account (As a User)

Use Case	Create Account		
Summary	Unregi	Unregistered users create an account to access platform	
	feature	s like booking therapy sessions.	
Preconditions	The us	The user must visit the website.	
Postconditions	The us	The user can access platform features after logging in	
Primary Actor	Unregi	Unregistered User	
Trigger	Users want to register and access the services.		
Main Scenario	Step	Action	
	1	Users visit the Create Account page.	
	2	User fills in the registration form and submits it.	
	3	The system validates the input data.	
	4	System sends a verification email.	
	5	User clicks the link to verify email.	
	6	The system activates the account.	
	7	User logs in using email and password.	
	8	System redirects the user to the Home page.	
Extensions	Step	Branching Actions	
	2a	If fields are missing/invalid, show error message.	
	3a	If email already exists, prompt users to use a different	
		one.	
	4a	If email sending fails, show error and allow resend.	

Table 3: Use case scenario for Appointment Booking

Use Case	Appointment Booking		
Summary	Registered users book therapy sessions with therapists.		
Preconditions	Users must log in, and therapists must have available time slots.		
Postconditions	Appointment is booked and payment is processed or deducted from the subscription.		
Primary Actor	Registered User		
Trigger	User in	User initiates therapy session booking.	
Main Scenario	Step	Action	
	1	User logs in using email and password.	
	2	User navigates to therapist's profile and clicks "Book Appointment.	
	3	User selects a preferred date and time.	
	4	System shows session details and therapist location if physical.	
	5	User selects a payment method: subscription or one-time payment.	
	6	User confirms the payment.	
	7	The system processes the payment and confirms the booking.	
Extensions	Step	Branching Actions	
	3a	If no time slots are available, the system suggests	
		alternatives.	
	4a	If the session is physical, the system confirms the	
		therapist's location.	
	5a	If subscription is expired or invalid, prompt for renewal	
		or payment.	
	6a	f payment fails, display error and prompt for retry.	

Table 4: Use case scenario for Generate Report

Use Case	Admin generates system reports based on category and date range.			
Summary		Admin must log in and access the report section.		
Preconditions	Admin	Admin must log in and access the report section.		
Postconditions	Report	Reports are generated and displayed or downloaded.		
Primary Actor	Admin	Admin		
Trigger	Admin	Admin selects report generation.		
Main Scenario	Step	Action		
	1	Admin logs into the system using email and password.		
	2	Admin navigates to the "Report Generation" section.		
	3	Admin selects a report category (e.g., financial, and user visits).		
	4	Admin chooses the type of report (weekly, monthly, or custom).		
	5	If "custom" is selected, admin enters start and end dates.		
	6	System generates and displays/downloads the report.		
Extensions	Step	Branching Actions		
	1a	If entered credentials are incorrect, display		
		unsuccessful message.		
	4a	If the required fields are not completed, notify the user		
		to fill them.		
	5a	If the record is not added successfully, display error		
	6a	If the report fails to generate, the system displays an		
	Va	error message.		
		enor message.		

02-Requirements

Table 5: Use case scenario for Create Workshop

Use Case	Create	Create Workshop.		
Summary	Therap	Therapist creates a new workshop for clients.		
Preconditions	Therap	Therapist must be logged in.		
Postconditions	Works	Workshops are available for users to view, pay, and join.		
Primary Actor	Therap	Therapist		
Trigger	Therap	Therapist selects to create a new workshop.		
Main Scenario	Step	Action		
	1	Therapist logs in using email and password.		
	2	Therapist navigates to the "Create Workshop" section.		
	3	Therapist selects type (Online/Physical) and enters details including date, time, fee, and location (if physical).		
	4	Therapist clicks the "Create Workshop" button.		
	5	System confirms creation and displays success message.		
Extensions	Step	Branching Actions		
	3a	If details are missing or incorrect, show an error message.		
	3b	If the fee is out of the acceptable range, suggest a reasonable fee.		
	5a	If not created successfully, show failure message.		

DFD Diagram

Link for high resolution diagram:

https://drive.google.com/file/d/1Z1_aPJyxE35ggLMzfDWSfsI6SbI1y1n7/view?usp=sharing

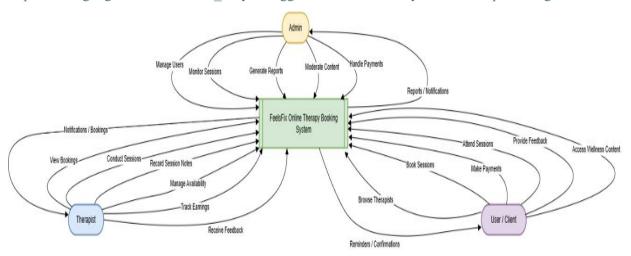


Figure 3: DFD for the System

Chapter 03 – Design and Development

Onion Diagram

Stakeholders

- Users
- Therapists
- Admins
- Payment Providers
- Regulatory Bodies

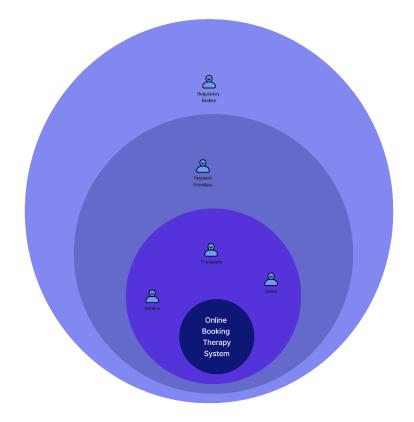


Figure 4:Onion Diagram (Stakeholders our system)

Use Case Diagram

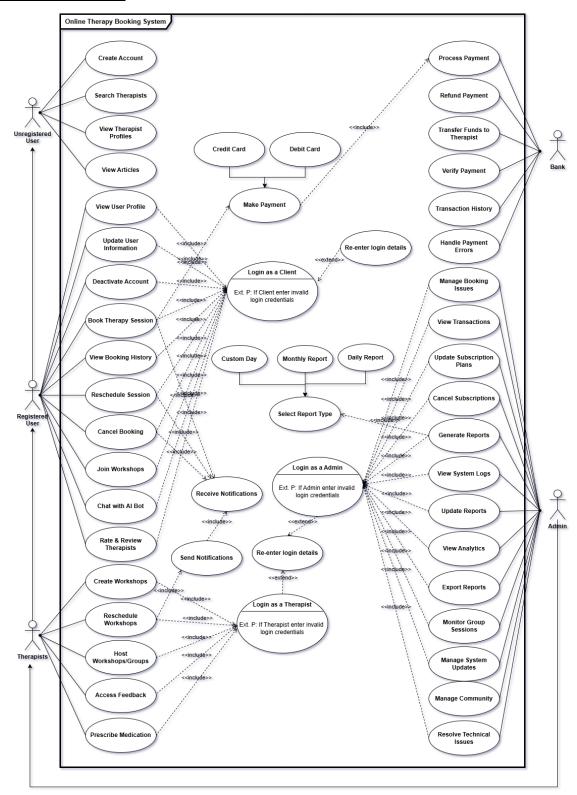


Figure 5: Use case Diagram for System

03-Design and Development

EER Diagram

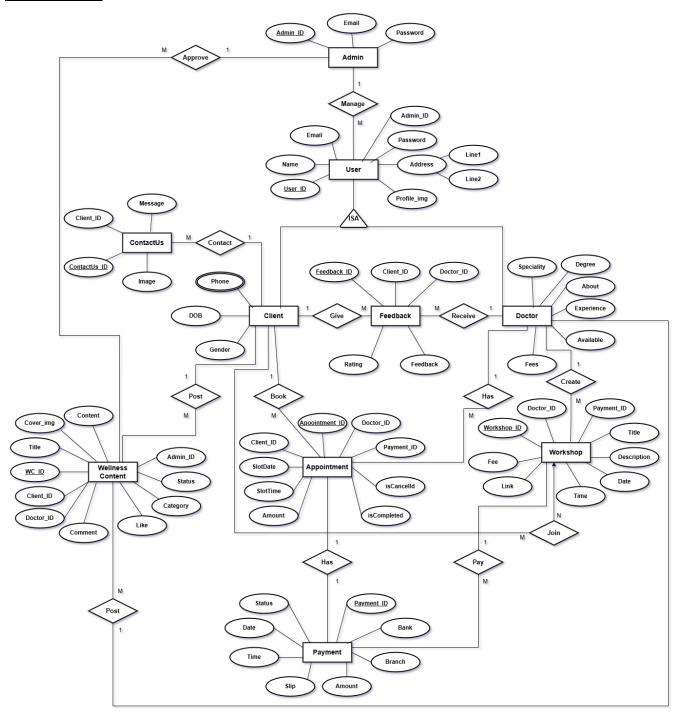


Figure 6: EER Diagram for System

03-Design and Development

Normalized Schema

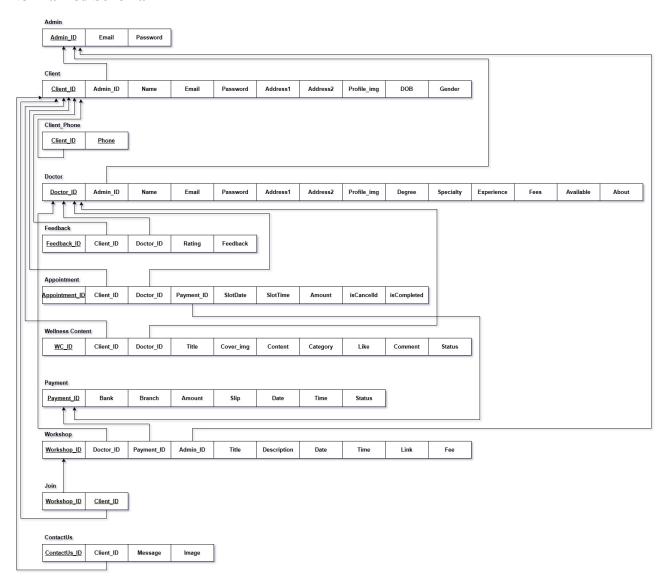


Figure 7: Normalized Schema for System

Network Diagram

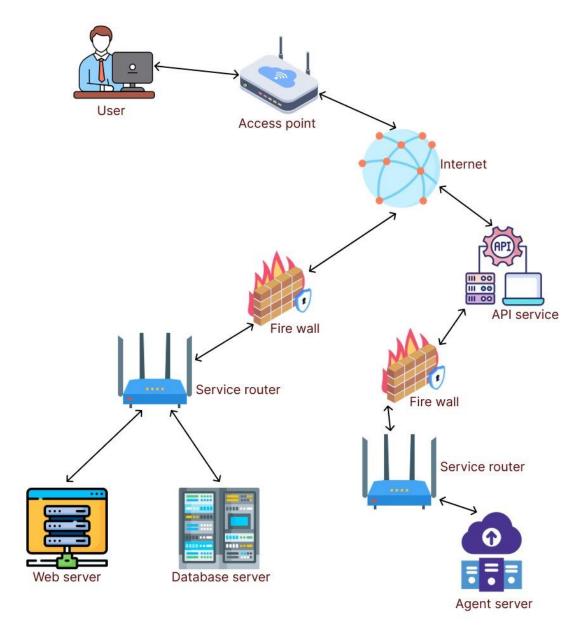


Figure 8: Network Diagram for System

03-Design and Development

High-level Diagram

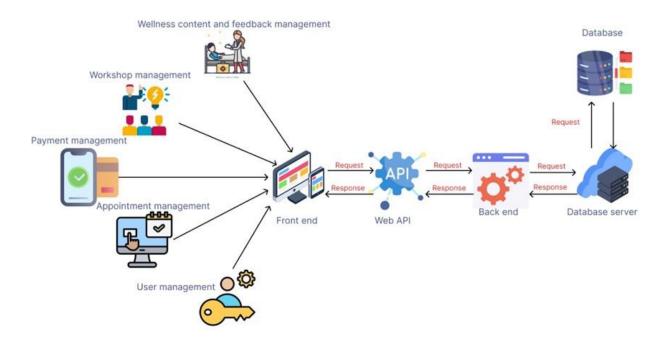


Figure 9: High-level Diagram for System

03-Design and Development

IT23166110 - D.D. Haputhanthri: User Management Flow Chart

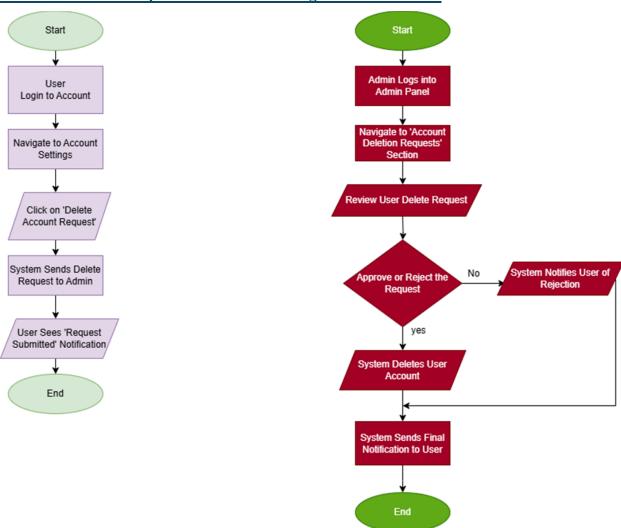


Figure 10: Flow Chart for User Management Component

IT23268258- B.P.L. Fernando: Appointment Management Flow Chart

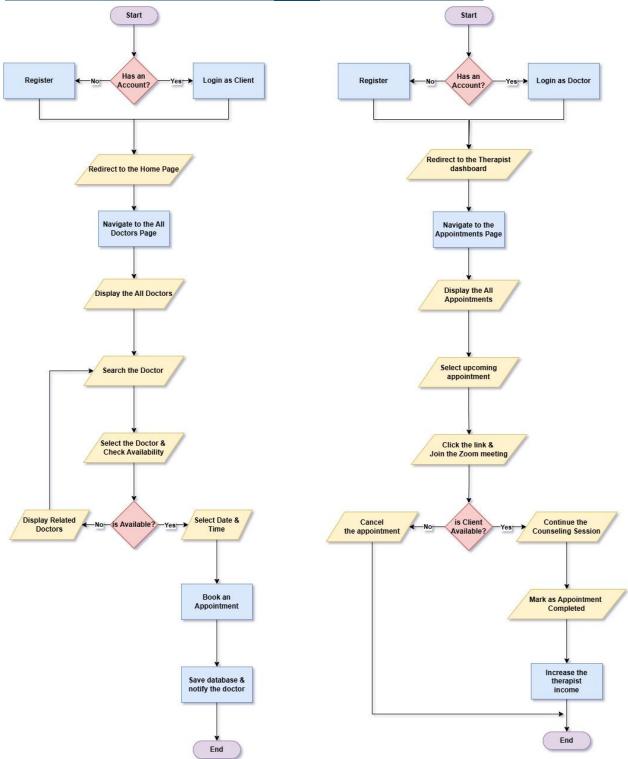
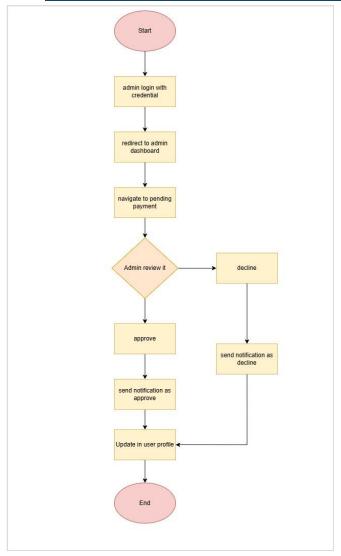


Figure 11: Flow Chart for Appointment Management Component

03-Design and Development

IT23275560 - A.D. Athauda: Payment Management Flow Chart



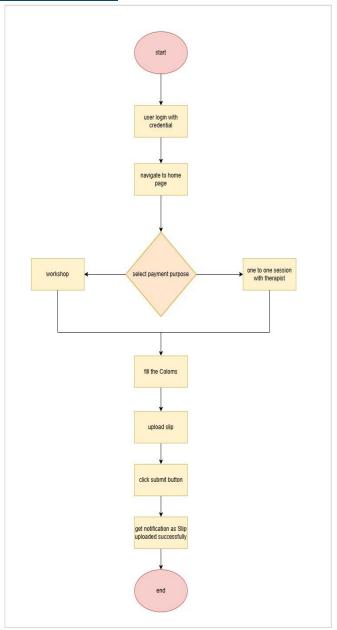


Figure 12: Flow Chart for Payment Management Component

03-Design and Development

IT23423992 - K.H. Dissanayake: Workshop Management Flow Chart

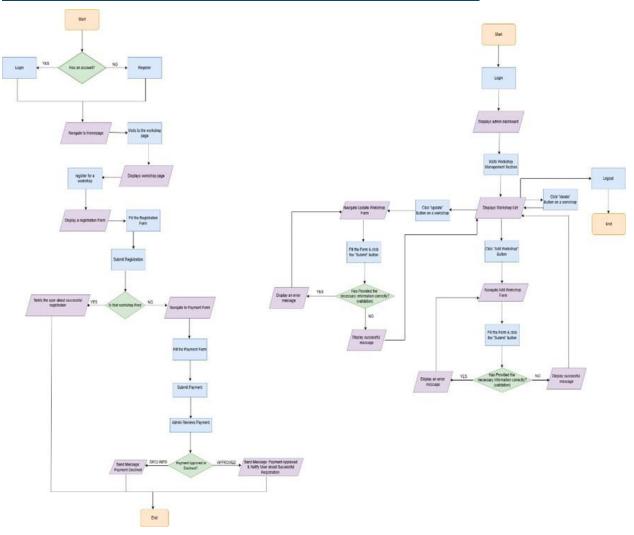


Figure 13: Flow Chart for Workshop Management Component

<u>IT23257436 - E.M.W.S. Ekanayake: Wellness Content & Feedback Management Flow Chart</u>

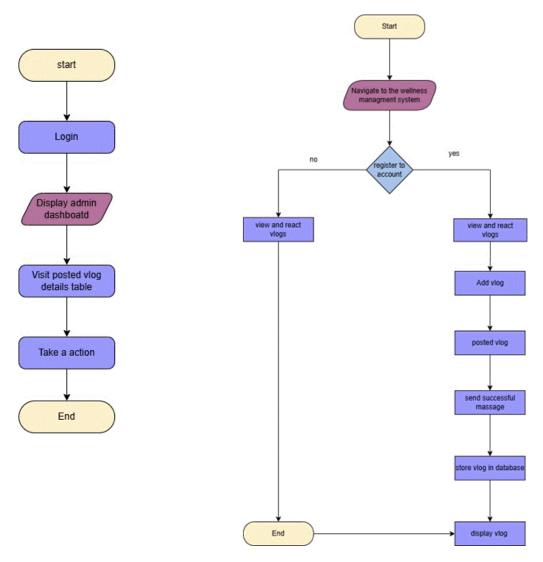


Figure 14: Flow Chart for Wellness Content & Feedback Management Component

Kanban Board

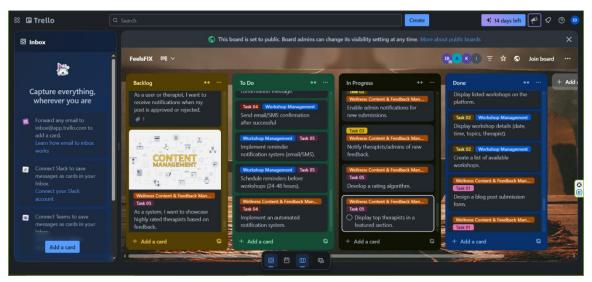


Figure 15: Kanban Board

Chapter 04 - Testing

Main Test Cases with Results

User Management - D.D. Haputhanthri

Test Case: User Registration Process

Test Case ID: UM_TC_01 Module: Authentication Feature: User Registration

Priority: High

Tested By: D.D. Haputhanthri

Date: 01/05/2025

Test Objective:

To verify that a new user can successfully register by providing valid details and that the system handles invalid inputs appropriately.

Step	Test Action	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to the registration page	-	Registration page loads with fields: Name, Email, Password, Confirm Password, Phone (optional).	Registration page loads with fields: Name, Email, Password, Confirm Password, Phone (optional).	Pass
2	Enter valid details and submit	Name: John Doe Email: john.doe@example.com Password: Secure@123 Confirm Password: Secure@123	User is registered; success message displayed. Redirected to login/dashboard.	User is registered; success message displayed. Redirected to login/dashboard.	Pass
3	Submit with an existing email	Email: john.doe@example.com (already registered)	Error: "Email already exists. Please use another email."	Error: "Email already exists. Please use another email."	Pass
4	Submit with invalid email format	Email: john.doe	Error: "Invalid email format."	Error: "Invalid email format."	Pass
5	Submit with password mismatch	Password: Secure@123 Confirm Password: Wrong@456	Error: "Passwords do not match."	Error: "Passwords do not match."	Pass
6	Submit with weak password	Password: 123	Error: "Password must be 8+ chars with special characters."	Error: "Password must be 8+ chars with special characters."	Pass
7	Submit with empty required fields	Leave Name or Email blank	Error: "[Field] is required."	Error: "[Field] is required."	Pass

Table 6: User Registration Test Case

Appointment Management - B.P.L. Fernando

Test Case: Book an Appointment

Test Case ID: TC APT 001

Module: Appointment Management **Feature**: Appointment Booking

Priority: High

Tested By: B.P.L. Fernando

Date: 01/05/2025

Test Objective:

To verify that a logged-in client can successfully book an appointment with a therapist, select a time slot and communication mode, and receive a confirmation notification.

Step	Test Action	Test Data	Expected Result	Actual Result	Status (Pass/Fail)		
1	Client logs in	Valid credentials (e.g., user@example.com, Pass@123)	Login successful; redirected to dashboard.	Login successful; redirected to dashboard.	Pass		
2	Navigate to "Book Appointment"	-	Therapist list and available time slots displayed.	Therapist list and available time slots displayed.	Pass		
3	Select therapist	Therapist: Dr. Smith	Therapist details and calendar load.	Therapist details and calendar load.	Pass		
4	Choose time slot	Slot: 10:00 AM - 11:00 AM, 2025-06- 01	Slot is highlighted; "Next" button enabled.	Slot is highlighted; "Next" button enabled.	Pass		
5	Select communication mode	Mode: Video Call	Mode is selected.	Mode is selected.	Pass		
6	Confirm booking	Click "Confirm"	Success message: "Appointment booked!" Confirmation email/SMS sent.	Success message: "Appointment booked!" Confirmation email/SMS sent.	Pass		
7	Verify calendar update	-	Appointment appears in client/therapist calendars.	Appointment appears in client/therapist calendars.	Pass		
Negat	Negative Tests						
8	Book occupied slot	Slot: 10:00 AM - 11:00 AM (already booked)	Error: "This slot is unavailable. Please choose another."	Error: "This slot is unavailable. Please choose another."	Pass		
9	Book without selecting mode	Skip Step 5	Error: "Please select a communication mode."	Error: "Please select a communication mode."	Pass		

Table 7: Appointment Booking Test case

Payment Management - A.D. Athauda

Test Case: Upload Bank Transfer Slip

Test Case ID: PM_TC_01 **Module**: Payment Management

Feature: Bank Slip Upload & Verification

Priority: High

Tested By: A.D. Athauda

Date: 01/05/2025

Test Objective:

To verify that users can successfully upload a valid bank transfer slip, and the system correctly marks it as "Pending Approval" for admin verification.

Step	Test Action	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	User navigates to payment section	-	Payment page loads with "Upload Slip" button.	Payment page loads with "Upload Slip" button.	Pass
2	Upload valid bank slip	File: payment_slip.jpg (≤5MB, JPG/PNG/PDF)	File uploads; preview displayed.	File uploads; preview displayed.	Pass
3	Submit for verification	Click "Submit"	Success message: "Slip uploaded! Status: Pending Approval."	Success message: "Slip uploaded! Status: Pending Approval."	Pass
Negat	tive Tests				
4	Upload invalid file type	File: payment.txt	Error: "Only JPG/PNG/PDF allowed."	Error: "Only JPG/PNG/PDF allowed."	Pass
5	Upload oversized file (>5MB)	File: large_slip.jpg (10MB)	Error: "File size exceeds 5MB limit."	Error: "File size exceeds 5MB limit."	Pass
6	Submit without uploading	No file selected	Error: "Please upload a bank slip."	Error: "Please upload a bank slip."	Pass

Table 8: banl slip upload Test Case

Workshop Management - K.H. Dissanayake

Test Case: Admin Approves Workshop Created by Therapist

Test Case ID: WM_TC_03

Module: Workshop Management

Feature: Workshop Approval Workflow

Priority: High

Tested By: K.H. Dissanayake

Date: 01/05/2025

Test Objective:

To verify that an admin can successfully review, approve, or reject workshops submitted by therapists, ensuring approved workshops are published while rejected ones remain hidden from users.

Step	Test Action	Test Data	Expected Result	Actual Result	Status (Pass/Fail)
1	Therapist creates a workshop	Title: "Mindfulness 101" Description: "Learn stress management" Date: 2025-07-15	Workshop saved as "Pending Approval".	Workshop saved as "Pending Approval".	Pass
2	Admin logs in	Admin credentials (admin@gmail.com, Admin@123)	Admin dashboard loads with "Pending Workshops" section.	Admin dashboard loads with "Pending Workshops" section.	Pass
3	Admin reviews workshop	Click "Review" on workshop listing	Workshop details displayed with Approve/Reject buttons.	Workshop details displayed with Approve/Reject buttons.	Pass
4	Admin approves workshop	Click "Approve"	Status changes to "Approved"; workshop is now visible to users.	Status changes to "Approved"; workshop is now visible to users.	Pass
5	Admin rejects workshop	Click "Reject" + Reason: "Incomplete details"	Status changes to "Rejected"; workshop remains hidden. Therapist notified.	Status changes to "Rejected"; workshop remains hidden. Therapist notified.	Pass
Negat	tive Tests				
6	Non- admin tries to approve	Therapist attempts to access /admin/workshops	Error: "Access denied. Admin privileges required."	Error: "Access denied. Admin privileges required."	Pass
7	Approve with missing data	Workshop missing title/date	System blocks approval; prompts admin to request revisions	System blocks approval; prompts admin to request revisions	Pass

Table 9: Workshop approval workflow Test case

Wellness Content & Feedback Management - E.M.W.S. Ekanayake

Enhanced Test Case: Submit Blog Post for Approval (with Image Upload)

Test Case ID: WC_TC_01 **Module:** Content Management

Feature: Blog Post Submission & Moderation

Priority: High

Tested By: E.M.W.S. Ekanayake

Date: 01/05/2025

Test Objective:

To verify users can submit blog posts **with images** for approval, ensuring images adhere to guidelines and display correctly post-approval.

Step	Test Action	Test Data	Expected Result	Actual Result	Status (Pass/Fail)		
1	User logs in	Valid credentials	Access to blog editor granted.	Access to blog editor granted.	Pass		
2	Upload cover image	File: wellness.jpg (JPEG, ≤2MB)	Image preview appears; "Upload Successful" toast.	Image preview appears; "Upload Successful" toast.	Pass		
3	Submit post with image	Title + Content + Attached image	Workshop details displayed with Approve/Reject buttons.	Workshop details displayed with Approve/Reject buttons.	Pass		
4	Admin approves post	Admin clicks "Approve"	Post saved as "Pending Approval". Image placeholder visible in admin view.	Post saved as "Pending Approval". Image placeholder visible in admin view.	Pass		
Negat	Negative Tests						
5	Upload unsupported format	File: chart.pdf	Error: "Only JPG/PNG allowed."	Error: "Only JPG/PNG allowed."	Pass		
6	Upload oversized image	File: high-res.jpg (10MB)	Error: "Max size: 2MB."	Error: "Max size: 2MB."	Pass		

Table 10: Blog Post Submission & Moderation Test Case

Chapter 05 - Evaluation and Conclusion

Introducing FeelsFix Online Therapy Booking System has changed the game for mental health and wellness industry at operations level, with end-to-end therapist-client interactions as well as admin task optimized solution. This assessment and conclusion are simply two sides of the same coin that captures the system performance and thrust, therapy service delivery impact and replicate across board contributions towards the platform and its users.

Features of FeelsFix system are extensive and degree specific for therapy platforms. The FeelsFix system manages therapist and client record, session scheduling as well as communication well. In addition, transactions and feedback receive processor payment as well, content moderation can be done smoothly so that it is an awesome experience for both the therapist and client. FeelsFix indeed manages to meet its goals of automation and simplification for trapmaking & trip making in general.

FeelsFix system of FeelsFix has shown itself to improve the efficiency and reach of mental health services at the macro level. Through its friendly interface, reliability and secure connection to video and payment platforms this makes accountable service delivery as well as increasing operational efficiency. Therapists can now check sessions and client files with ease while clients on the other can transform therapy service utilization for immediate, efficient and confidential access.

Regular updates and maintenance as well fixed any technical troubles as they come are needed to keep FeelsFix running successfully in future. Moreover, feature-rich feedback from therapists and clients both give us additional insights to improve functionality and client satisfaction.

Finally, the FeelsFix Online Therapy Booking System will help expand access and streamline the delivery on-platform efficiency to high quality mental health services.

It has now been integrated as a workflow machine for therapy sessions, hoping for communication and maintaining a safe & supportive experience of all users.

Chapter 06 – References

- 1. BetterHelp (BetterHelp | Professional Therapy With A Licensed Therapist)
- 2. Talkspace (Talkspace #1 Rated Online Therapy, 1 Million+ Users)
- 3. Amwell Behavioral Health (https://resources.amwell.com/behavioral-health)
- 4. 7 Cups (7 Cups | Free Online Therapist & Counseling)
- 5. TherapyRoute (Find a Therapist Near You | Local Psychologists & Counsellors | TherapyRoute)
- 6. MyTherapist (MyTherapist)
- 7. Psychology Today (Psychology Today: Health, Help, Happiness + Find a Therapist)
- 8. ReGain (Regain Relationship Therapy)
- 9. Red Cross (American Red Cross | Help Those Affected by Disasters)
- 10. SAMHSA (Substance Abuse and Mental Health Services Ad ministration (<u>SAMHSA Substance Abuse and Mental Health Services Administration</u>)
- 11. Crisis Text Line (<u>Crisis Text Line | Text HOME to 741741 Free, 24/7 Mental Health Support</u>)
- 12. DisasterAssistance.gov (Home | disasterassistance.gov)
- 13. Christian Counselors in Tampa, Florida Above & Beyond Christian Counseling
- 14. Permanente Medicine is the leading model for health care delivery
- 15. APA PsycNet FullTextHTML page
- 16. Handling a Therapy Waitlist: Strategies and Alternatives: OpenCounseling
- 17. Managing Your Waitlist Psychotherapy Networker
- 18. What To Do On A Therapy Waitlist | Psychology.org

Work Done by Members

	SID	Name	Work	
1.	IT23166110	D.D. Haputhanthri	User Management	
2.	IT23275560	A.D. Athauda	Payment Management	
3.	IT23423992	K.H. Dissanayake	Workshop Management	
4.	IT23268258	B.P.L. Fernando	Appointment Management	
5.	IT23257436	E.M.W.S. Ekanayake	AB	

Contribution to Final Report

	SID	Name	Contribution
1.	IT23166110	D.D. Haputhanthri	User Management Flowchart,
			User Management Main Test
			Case, Chapter 1, Chapter 6
2.	IT23275560	A.D. Athauda	Payment Management
			Flowchart, Payment
			Management Main Test Case,
			Chapter 5, Abstract
3.	IT23423992	K.H. Dissanayake	Workshop Management
			Flowchart, Workshop
			Management Main Test Case,
			Chapter 3, Acknowledgment
4.	IT23268258	B.P.L. Fernando	Appointment Management
			Flowchart, Appointment
			Management Main Test Case,
			Chapter 2, Wellness Content &
			Feedback Management Main
			Test Case, Wellness Content &
			Feedback Management
			Flowchart
5.	IT23257436	E.M.W.S. Ekanayake	AB