Sri Lanka Institute of Information Technology

FeelsFIX Online Therapy Booking System

Activity 02_ITP25_B7_C155

INFORMATION TECHNOLOGY PROJECT – IT2080

B.Sc. (Hons) in Information Technology

Group Details

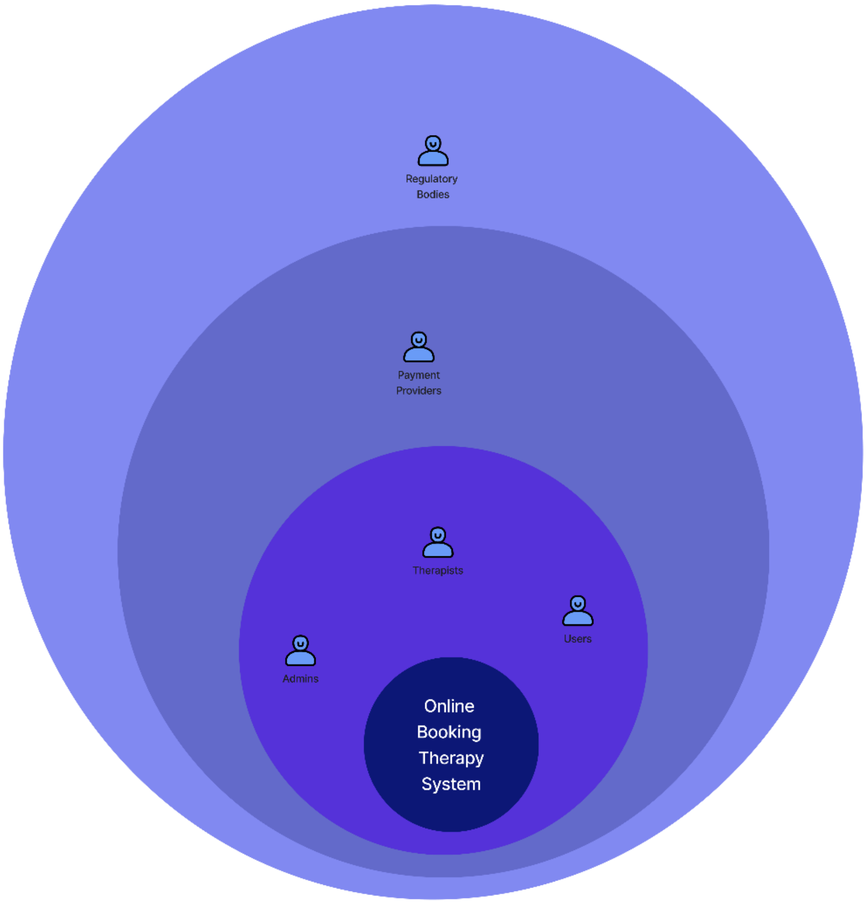
	Student ID	Student Name	Email	Contact Number
1	IT23166110	D.D. Haputhanthri	it23166110@my.sliit.lk	0775907458
2	IT23275560	A.D. Athauda	it23275560@my.sliit.lk	0774341445
3	IT23423992	K.H. Dissanayake	it23423992@my.sliit.lk	0774960272
4	IT23268258	B.P.L. Fernando	it23268258@my.sliit.lk	0719930179
5	IT23257436	E.M.W.S. Ekanayake	it23257436@my.sliit.lk	0703546465

Table of Contents

1 Onion Diagram (stakeholders our system)

Stakeholders

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



2 Functional Requirements for direct system users

- **Admin**

  - **Login/Logout**: Admin must be able to securely log into and log out of the system.

  - **User Management**: Admin should be able to:

    -View and manage users (clients, therapists).

    -Create, update, or delete user accounts.

    -Suspend or block users in case of inappropriate behavior.

  - **Content Moderation**: Admin can:

    -Monitor and moderate user-generated content (community posts, comments).

    -Flag or delete harmful comments and posts (cyberbullying, offensive language).

  - **Report Generation:** Admin can generate reports based on categories (financial, user visits, therapist activity, etc.), with options for selecting time periods (weekly, monthly, or custom).

  - **Payment Management:** Admin should:

    -View and manage payment transactions, including refunds and therapist payouts.

    -Monitor payment history and generate financial reports.

  - **Session Management:** Admin can:

    -View and track therapy sessions held by therapists and clients.

    -Ensure therapists are meeting minimum session requirements (if applicable).

  - **Compliance Management:** Admin ensures that:

    -Therapists have valid licenses and certifications.

    -The platform complies with data protection laws (e.g., HIPAA, GDPR).

❖ Therapist

- **Login/Logout**: Therapists must be able to securely log into and log out of the system.

- **Client Management**: Therapists should be able to:

  -View their assigned clients and their progress.

  -Schedule and manage therapy sessions (both online and in-person).

  -Record session notes and progress reports for each client.

- **Session Conducting**: Therapists must:

  -Conduct therapy sessions with clients via video, chat, or audio calls.

  -Access relevant client information during sessions (history, progress).

- **Payment Tracking**: Therapists should be able to:

  -View their payment history and track earnings from completed sessions.

  -Request payouts or view payout schedules.

- **Availability Management**: Therapists can:

  -Set their availability for therapy sessions and update it as needed.

  -Block off unavailable times for personal reasons or vacations.

- **Review and Feedback**: Therapists should:

  -Receive feedback from clients after each session.

  -Monitor their ratings and reviews to improve service quality.

- **User**
  - **Login/Logout**: Users must be able to securely log into and log out of the system.

  - **Profile Management**: Users should be able to:

    -Create and update their profile (personal information, preferences, etc.).

    -View their therapy history and progress.

- **Session Booking**: Users can:

  -Search and browse available therapists.

  -Book therapy sessions based on the therapist's availability.

  -Cancel or reschedule appointments (within specified guidelines).

- **Payment Handling**: Users must be able to:

  -Pay for therapy sessions using secure payment methods (credit card, bank transfer, etc.).

  -View payment history and invoices for sessions.

- **Feedback and Rating**: Users should be able to:

  -Leave feedback and rate therapists after sessions.

  -Report any issues with sessions or therapists (inappropriate behavior, technical issues).

- **Privacy and Security**: Users should be able to:

  -Access and update their privacy settings (data sharing preferences).

  -View and delete personal information if desired (per platform guidelines).

3 Non-functional requirements for direct system users

- **Admin**

  - **Fast & Reliable**: The system should run smoothly and handle thousands of users without delays.
  - **Secure Access**: Only authorized admins can manage users, payments, and reports.
  - **Privacy Protection**: User data must be encrypted and follow legal regulations (e.g., HIPAA, GDPR).
  - **Easy-to-Use Dashboard**: Admin tasks like banning users, generating reports, and moderating content should be simple.
  - **24/7 Monitoring**: System should alert admins about errors, security risks, or downtime**.**

- **Therapist**

  - **Fast Scheduling**: Therapists should book, manage, and view sessions within seconds.
  - **Secure Client Data**: Only the assigned therapist can access a client's history and session notes.
  - **Automatic Logout**: System logs out inactive therapists to protect client data.
  - **Mobile-Friendly**: The platform should work smoothly on phones, tablets, and computers.
  - **Real-Time Alerts**: Therapists get notifications for upcoming sessions, messages, and payments.

- **User**
  - **Quick & Easy Booking**: Users should find therapists and schedule sessions in just a few clicks**.**
  - **Safe & Private**: Personal and payment information must be secure and encrypted**.**
  - **Reminders & Notifications**: Users get alerts for upcoming sessions and payments**.**
  - **Simple & User-Friendly**: The platform must be easy to use**,** even for non-tech-savvy people.
  - **24/7 Support**: Users should get help anytime for bookings, payments, or technical issues**.**

4 Technical Requirements for the Online Booking Therapy System (MERN Stack)

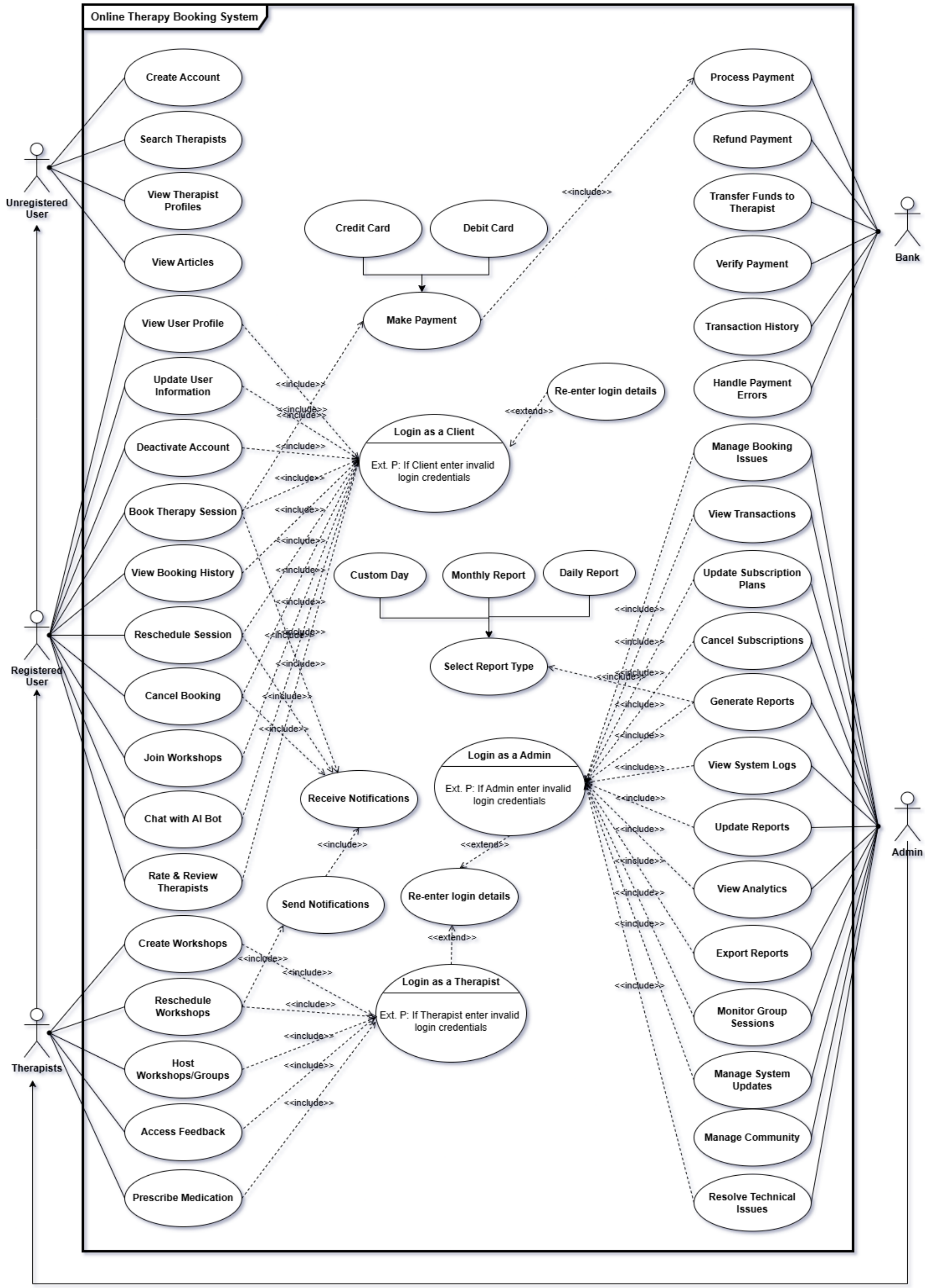
- **Platform & Frameworks**
  - Backend: Node.js with Express.js
  - Frontend: React.js for a user interface.
  - Database: MongoDB for flexible and scalable data storage.
  - Server: Node.js (with Express.js) as the application server.

- **Architecture**
  - MVC (Model-View-Controller) pattern for clean separation of concerns.

- **Application**
  - VsCode

- **GIT HUB**
  - helps with version control, collaboration, and deployment

5 Use Case Diagram



6 Use Case Description

1. Create an account (As a therapist)

ID	01	
Name	Create Account	
Summary	Therapists must complete a registration process to create an account and access platform features.	
Priority	01	
Pre-conditions	Therapist Must visit the website.	
Post-conditions	Therapist can host online therapy sessions and publish articles.	
Primary Actor	Therapist	
Trigger	The therapist wants to register and gain access to the website.	
Main Scenario	**Step**	**Action**
	1	The therapist visits the Create Account page.
	2	The therapist fills out the registration form (name, email, password, etc.).
	3	The therapist uploads required documents (ID, certifications, profile image).
	4	The therapist clicks the Sign-Up button.
	5	The system validates the provided information.
	6	The system sends a confirmation email with a verification link.
	7	The therapist opens the email and clicks the verification link.
	8	The system confirms the email verification and activates the account.
	9	The therapist logs in for the first time using their registered email and password.
	10	The system redirects the therapist to the Home page.
Extensions	**Step**	**Branching Action**
	2a	If details are missing/incorrect, the system prompts the user to correct them.
	3a	If document size is too large, system suggests resizing.
	5a	If any required fields are missing, the system shows an error message.
	6a	If the email is already registered, the system notifies the user.
	7a	If the user does not verify the email, the account remains inactive.
	9a	If the login fails (wrong password or unverified account), the system shows an error message.
Open Issues	1	Username already exists

2. Create an account (As a User)

ID	02	
Name	Create Account	
Summary	To create an account and use platform services like scheduling therapy sessions and viewing available therapists, an unregistered user must finish the registration process.	
Priority	01	
Pre-conditions	Unregistered user must visit the website.	
Post-conditions	User can browse therapists, book therapy sessions, and access other platform features.	
Primary Actor	Unregistered user	
Trigger	The unregistered user wishes to create an account to access the website's services.	
Main Scenario	**Step**	**Action**
	1	The unregistered user visits the Create Account page.
	2	The unregistered user fills out the registration form (name, email, password, etc.).
	3	The unregistered user agrees to the terms and conditions and submits the form.
	4	The system validates the information provided (checks if all fields are filled correctly).
	5	The system sends a confirmation email with a verification link.
	6	The unregistered user opens the email and clicks the verification link.
	7	The system confirms the email verification and activates the account.
	8	The unregistered user logs in for the first time using their email and password.
	9	The system redirects the user to the Home page.
Extensions	**Step**	**Branching Action**
	2a	If details are missing/incorrect, the system notifies the user to correct them.
	4a	If the email address is already in use, the system prompts the user to use a different email.
	5a	If the system fails to send the confirmation email, the system alerts the user and provides an option to resend.
	8a	If the user fails to log in due to an incorrect password, the system shows an error message and allows password recovery.
Open Issues	1	When registering, should the system check for duplicate emails automatically or should it wait till the form has been submitted?

3. Create Workshop

ID	03	
Name	Create Workshop	
Summary	A therapist creates a workshop for clients, allowing them to join online or physical therapy sessions for a specified fee.	
Priority	03	
Pre-conditions	The therapist must be logged into the website.	
Post-conditions	Users can view, pay for, and join the workshop once it is successfully created.	
Primary Actor	Therapist	
Trigger	The therapist requests to create a new workshop and set a fee for participation.	
Main Scenario	**Step**	**Action**
	1	The therapist opens the "Create Workshop" tab.
	2	The therapist selects the workshop type (Online or Physical).
	3	The therapist enters workshop details, including time, date, seat count, and workshop fee. If the workshop type is 'Physical,' the therapist must also provide the location address.
	4	The therapist clicks the "Create Workshop" button.
	5	The system confirms creation and sends a notification that the workshop has been successfully created.
Extensions	**Step**	**Branching Action**
	3a	If the entered details are incorrect, the system alerts the therapist to fix errors.
	3b	If required fields are missing or incorrect, the system displays an error message and prevents submission.
	3c	If the workshop fee is too high or too low, the system may suggest a reasonable price range.
Open Issues	1	Should the therapist be allowed to edit or delete a workshop after it has been created?
	2	Should the system send email notifications to clients when a new workshop is created?
	3	What happens if the workshop reaches maximum capacity?
	4	Should the system allow discount codes or early-bird pricing for workshops?

4. Appointment Booking

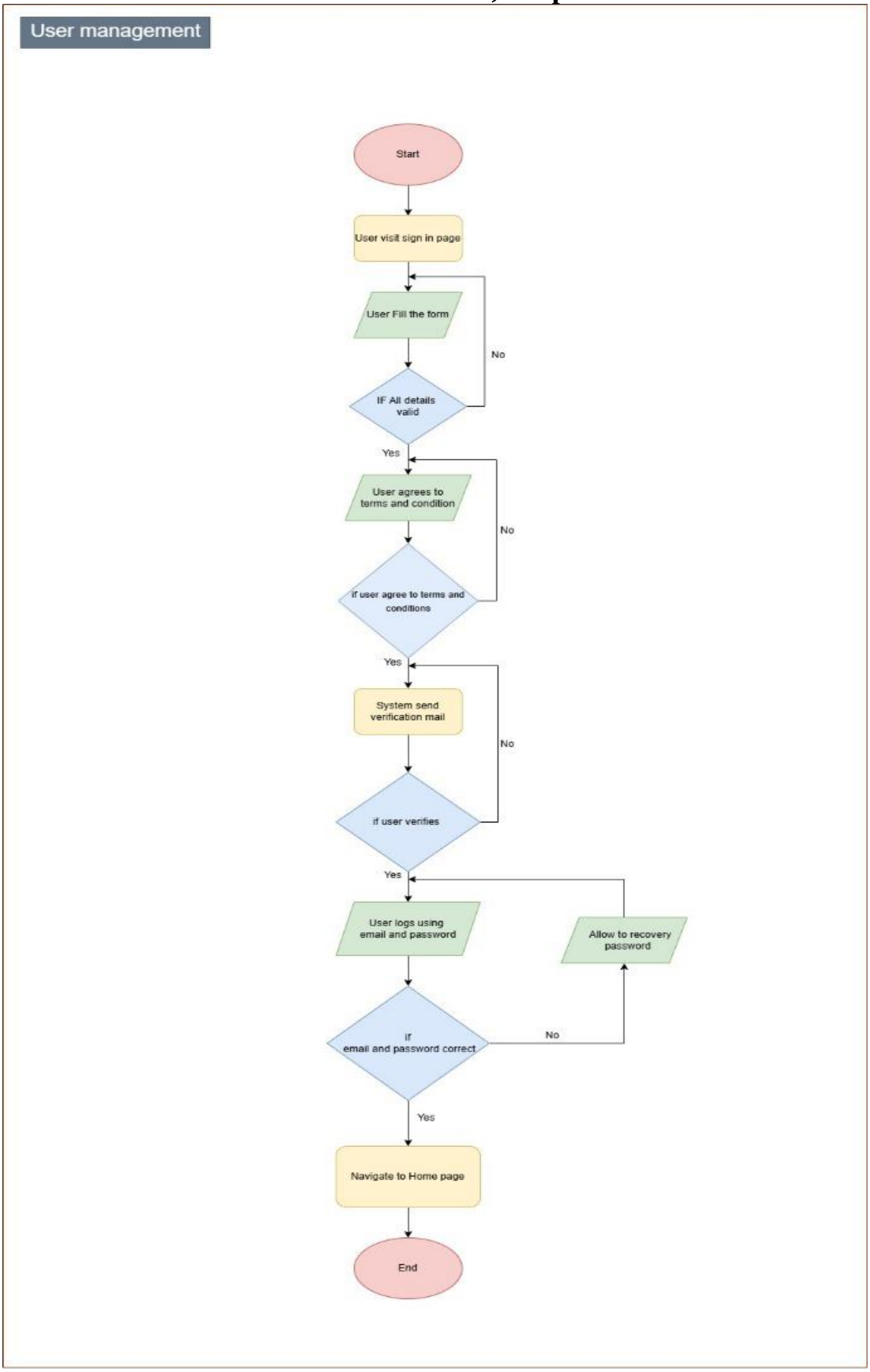
ID	04	
Name	Appointment Booking	
Summary	A registered user books a therapy session with a therapist and completes the payment process, either through a one-time payment or a subscription plan.	
Priority	01	
Pre-conditions	The user must be logged in, the therapist must have available time slots, and the user must have a valid payment method or an active subscription plan.	
Post-conditions	The therapy session is booked and confirmed, the user receives a confirmation notification or email, and the payment is processed or deducted from the subscription plan.	
Primary Actor	Registered User	
Trigger	The user initiates a request to book a therapy session with a therapist.	
Main Scenario	**Step**	**Action**
	1	The user navigates to the therapist's profile and clicks the "Book Appointment" button.
	2	The user selects a preferred date and time slot from the therapist's availability.
	3	The system displays session details, including price, duration, and session type (online or physical).
	4	If the session is physical, the system also displays the therapist's location.
	5	The user chooses a payment option: pay-per-session or use an active subscription plan.
	6	If the user has a valid subscription, the system deducts the session from their plan instead of charging separately.
	7	If the user does not have a subscription, they proceed with a one-time payment.
	8	The user enters payment details (if needed) and confirms the payment.
	9	The system processes the payment and sends a confirmation of the booking.
	10	The user and therapist receive a notification/email with the appointment details.
Extensions	**Step**	**Branching Action**
	2a	If no time slots are available, the system notifies the user and suggests other therapists or dates.
	3a	If the user selects a physical session, the system prompts them to confirm the therapist's location.
	5a	If the user's subscription plan has expired or doesn't cover this session, the system prompts them to renew or pay separately.
	5b	If the user wants to subscribe instead of paying per session, they are redirected to the subscription purchase page.
	7a	If the payment fails, the system notifies the user and asks them to try again with another method.

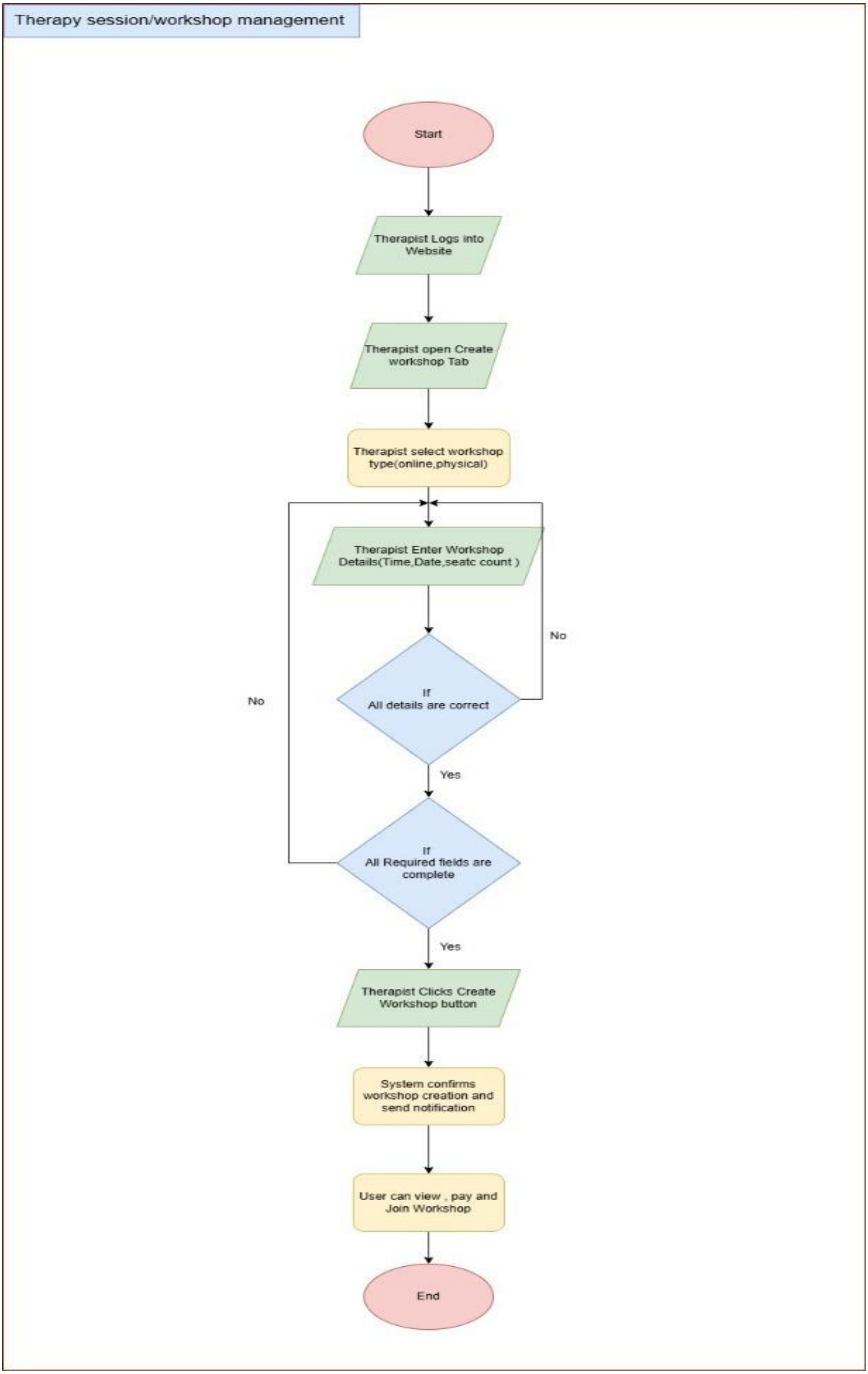
Open Issues	1	Should the user be able to reschedule or cancel an appointment after booking?
	2	Should the platform allow partial payments or deposits for sessions?
	3	What happens if the therapist cancels the session?
	4	Should the subscription cover all therapists or only selected ones?
	5	Should the system allow automatic renewal of subscriptions?

5. Generate Report

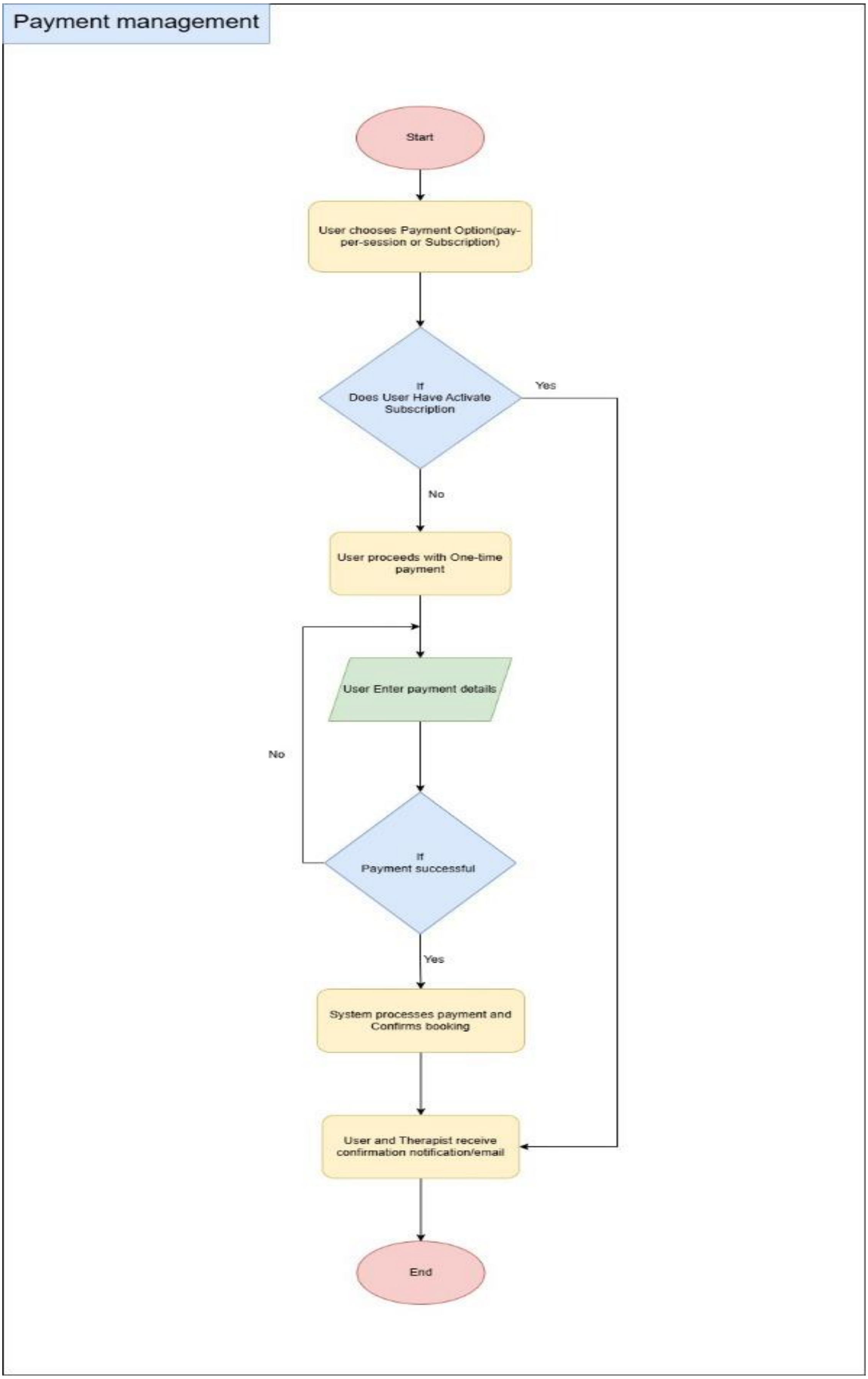
ID	05	
Name	Generate Report	
Summary	The admin generates reports by selecting a category and then specifying the report type (weekly, monthly, or custom date).	
Priority	02	
Pre-conditions	The admin must be logged in, have access to the report generation section, and the data for the selected category must be available and up to date.	
Post-conditions	The system generates the report based on the selected category and time range, and the admin receives a downloadable report or a summary.	
Primary Actor	Admin	
Trigger	The admin requests to generate a report by navigating to the report section.	
Main Scenario	**Step**	**Action**
	1	The admin logs into the platform and navigates to the report generation section**.**
	2	The system displays a list of available report categories (e.g., financial, user visits, therapist activity).
	3	The admin selects a report category (e.g., Financial Report).
	4	The system prompts the admin to choose the time period for the report: weekly, monthly, or custom date range.
	5	The admin selects the report type (weekly, monthly, or custom).
	6	If the admin selects custom date, they are prompted to enter a start and end date**.**
	7	The system generates the report based on the selected category and time range.
	8	The system provides a downloadable report or displays it on the admin's dashboard.
	9	The admin receives a notification that the report is ready for viewing or download.
Extensions	**Step**	**Branching Action**
	4a	If the admin fails to select a time period (e.g., leaves the option blank), the system prompts them again**.**
	6b	If the admin enters incorrect dates (start date is later than end date), the system displays an error message and asks for correct input.
Open Issues	1	Should the admin be able to filter reports by specific therapists or other parameters?
	2	Should there be an export option for reports (PDF, Excel)?
	3	Is there a limit on the number of reports the system can generate at once?
	4	How should the system handle large reports that may take a long time to generate (provide a progress bar or notification)?

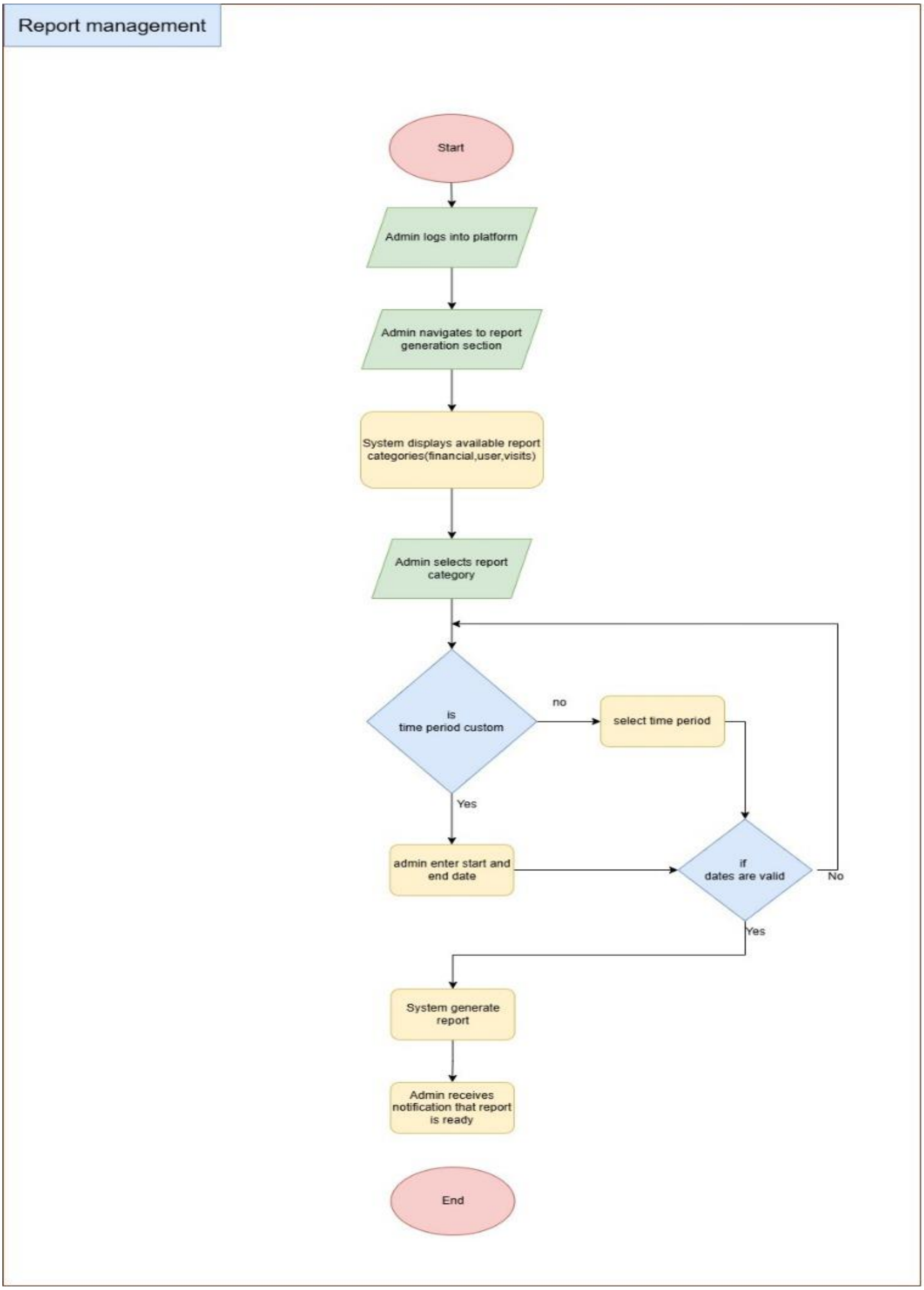
7 Visual Presentation of Data Flow, the process Flow and Data Connections

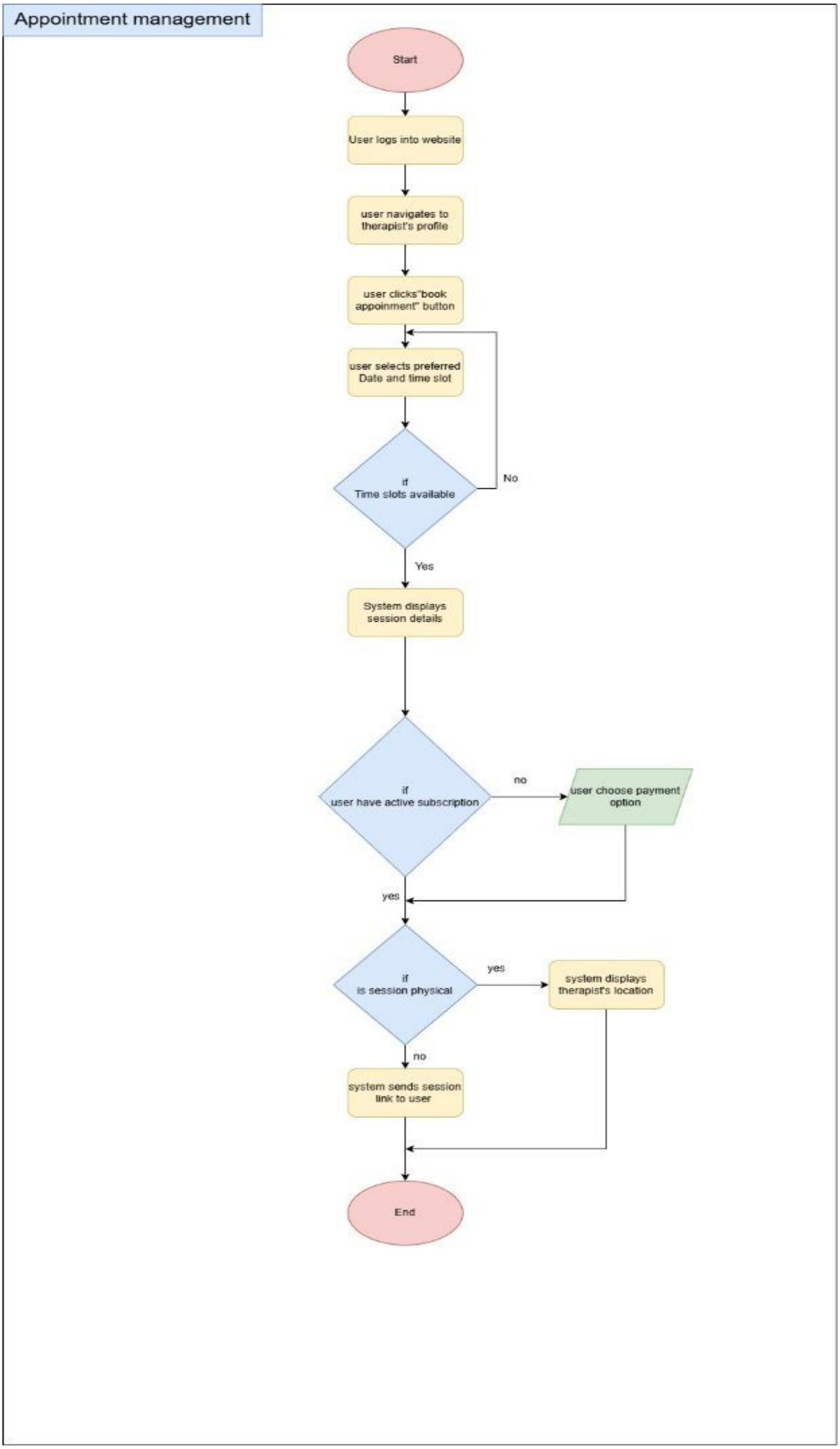




Therapy session/workshop management
Start
Therapist Logs into Website
Therapist open Create workshop Tab
Therapist select workshop type(online,physical)
Therapist Enter Workshop Details(Time,Date,seatc count)
No
If All details are correct
No
Yes
If All Required fields are complete
Yes
Therapist Clicks Create Workshop button
System confirms workshop creation and send notification
User can view , pay and Join Workshop
End


Payment management
Start
User chooses Payment Option(pay-per-session or Subscription)
If
Does User Have Activate Subscription
Yes
No
User proceeds with One-time payment
User Enter payment details
No
If
Payment successful
Yes
System processes payment and Confirms booking
User and Therapist receive confirmation notification/email
End


Report management
Start
Admin logs into platform
Admin navigates to report generation section
System displays available report categories(financial,user,visits)
Admin selects report category
is time period custom
no
select time period
Yes
admin enter start and end date
if dates are valid
No
Yes
System generate report
Admin receives notification that report is ready
End


Appointment management
Start
User logs into website
user navigates to therapist's profile
user clicks"book appoinment" button
user selects preferred Date and time slot
if Time slots available
No
Yes
System displays session details
if user have active subscription
no
user choose payment option
yes
if is session physical
yes
system displays therapist's location
no
system sends session link to user
End

8 Project Plan

Phase 1: Planning and Requirement Analysis (Week 1-2)

- Define functional requirements.
- Define roles in the system. (Client, Therapist, Admin)
- Assign team roles.
- Discuss Technology Stack.
  - MERN: MongoDB, express.js, React.js, Node.js
- At the end of this phase the team will have a clear roadmap about the project.

Phase 2: UI/UX Design (Week 3-4)

- Create Wireframes and Prototype: Design layouts using Figma.
- Define UI Design principles. (Simple, user-friendly)
- Identify and create UI Components:
  - Home
  - Client & Therapist Profile…
- Discuss and finalize the design.

Phase 3: Backend Development (Week 5-8)

- Set up MongoDB Database with collection:
  - Users (Clients, Therapist, Admins)
  - Appointment (Record of Appointment)
  - Payment (Transaction Record)
  - Workshop (Details of Workshop)
- Develop REST APIs using Node.js and Express.js.
- Testing APIs with Postman.

Phase 4: Frontend Development (Week 5-8)

- Set up React.js project.
- Develop UI components.
  - Home page
  - Login/Register page
  - Appointment form page
  - Workshop page
- Integrate frontend with APIs using Axios.

Phase 5: Integration and Testing (Week 9-11)

- Set Up GitHub Repository structure.
- Use feature branching in Git.
    - Each developer works on separate feature branches.
    - Push code to GitHub with git push origin branch-name.
- Merge via Pull Requests. (PRs)
- Test the entire system together.

Phase 6: Final Testing and Deployment (Week 12-14)

- Fix bugs from Integration.
- Final testing with sample users.
- Deploy backend on Render/Heroku.
- Deploy frontend on Vercel/Netlify.
- Configure domain.