Online Portal Pursuing Purposeful Play (O4P)

Project Documentation Submitted to the Faculty of the
School of Computing and Information Technologies

Asia Pacific College

In Partial Fulfillment of the Requirements for
Systems Analysis & Detailed Design for CS/IT
M/S SSYADD1

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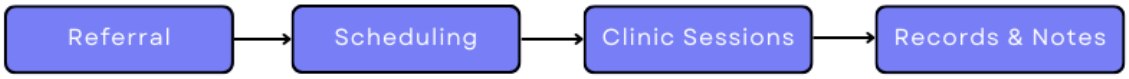
I. Introduction

1.1 Project Context

Therapro Therapy Clinic is a family-owned clinic owned by Ms. Zoraide De Jesus Francisco. Established in 1999, the clinic specializes in occupational therapy for children with physical, sensory, or cognitive challenges. Ms. Zoraida's approach utilizes fun activities and play to develop essential skills and target the specific needs of her patients.

Therapro Therapy Clinic employs a manual and very hands-on, paper-based system for its processes. As illustrated in Fig. 1 this depicts the flow of the current system's processes.



1. **Patient Referral.** The process begins with a patient referral, typically from a pediatrician.
2. **Scheduling.** Patients contact the clinic via phone call or message to schedule appointments. This method can be time-consuming for both the clinic staff and the patients themselves. An online scheduling system is not currently available.
3. **Clinic Sessions.** Therapy sessions are conducted in person at the physical location of the clinic.
4. **Records & Notes.** maintain paper-based records documenting patient progress and treatment notes. This system makes it challenging to track progress longitudinally and share information effectively with patients and guardians.

Therapro's current system has several limitations, hindering the efficiency and potential growth of the business. The manual scheduling process can be time-consuming and is prone to errors. Communication to find the right data for an appointment can lead to delays and frustrations on both ends.

Additionally, the clinic's current system lacks the flexibility to offer online services. Nowadays telehealth and remote services are becoming increasingly popular, this inflexibility can hinder business growth. By not having an online platform, Therapro Therapy Clinic is missing out on the opportunity to reach patients who may not be able to attend face to face sessions due to geographical limitations. Furthermore, the lack of online presence can make it difficult for new patients to discover Therapro's services. This limitation hinders the clinic's ability to reach a wider range of potential patients.

Lastly, having a paper-based system to hold records proves to be inefficient to manage. These records are also susceptible to damage or loss. Additionally, sharing information and tracking the child's progress overtime would be difficult due to the physical nature of records.

This web-based portal project aims to address the limitations of the current system and enhance Therapro Therapy Clinic's overall operations. The primary goal is to improve efficiency, increase patient volume, and provide a flexible enhanced therapy experience. This aligns with

Ms. Francisco's vision of expanding her reach and positively impacting the lives of children to create a more accessible and engaging therapeutic environment.

The proposed web portal system would directly contribute to Therapro's business strategy in more ways than one:

- **Increased Efficiency.** The automation of appointment scheduling and recording-keeping through the web portal, with this, Ms. Francisco will be able to dedicate more time to her patients.
- **Improved Patient Access.** The website will also serve as an online presence for the clinic, increasing its visibility and allowing potential patients to discover its services conveniently.
- **Enhanced Therapy Experience.** The portal will introduce various gamified activities catering to specific skills that patients may need improvement on. It will also contain progress tracking features, ensuring an engaging and motivating therapeutic experience for children. These, however, will not serve as a diagnostic tool, since patients come to the clinic after already contacting a medical professional.

By achieving these goals, the project will directly contribute to Therapro Therapy Clinic's long-term growth and expansion of reach of providing occupational therapy services to a wider range of clients outside of the general area of Imus, Cavite.

1.2 Statement of the Problem

Therapro Therapy Clinic is facing issues that hinder the clinic's visibility, flexibility, and efficiency. As such, the proposed product aims to address such challenges to improve the current state of the clinic. Specifically, these problems are:

1. **Limited to onsite sessions.** Having only in-person sessions creates a barrier for patients that are facing issues with travelling. This may pose as a threat in reaching new patients and may cause constant rescheduling of regular patients.
2. **Inefficient scheduling system.** This issue may lead to appointment delays and negative patient satisfaction. The clinic's phone-based scheduling system can be laborious for the staff and lacks the option of online scheduling.
3. **Hard to manage records.** Having smooth clinic operations requires its database to be fast and easy to access. The clinic may be used to managing their patients with their long running paper-based records but maintaining it has proven to be a challenge because of the resources required in operating it. Ignoring this will certainly impact clinic operations in the future as it grows.
4. **Lack of online presence.** This problem impacts the clinic's reach in new patients. In addition, the clinic's dependance on referrals of pediatricians may cause inefficiency to accumulate more patients for the clinic due to sole reliance of how often the pediatricians refer their patients to Therapro Therapy Clinic.

1.3 Objectives

This project aims to develop a comprehensive a web-based portal and system for Therapro Therapy Clinic. The portal will address the limitations of the current manual system by streamlining appointment scheduling, offering secure patient portals for record access, and providing educational resources for their patients. Additionally, the portal will integrate Augmented Reality (AR) technology into therapy sessions, allowing the therapist to utilize engaging and immersive exercises for improved patient experience and motivation.

To achieve these goals, the project outlines the following specific objectives:

- **Decrease the amount of time it takes to complete the scheduling process by at least 40%.** The project will implement an online appointment scheduling system to reduce reliance on phone calls and streamline appointment booking. An automated appointment confirmation and reminder feature within the system will be utilized to minimize scheduling conflicts and missed appointments. With these augmented processes, Therapro's customers will be able to schedule their appointments faster. This will also result in the staff being able to focus on other processes in the clinic.
- **Enhance patient experience with therapy sessions through the implementation of AR technology**. This entails designing and integrating appropriate gamified activities within the system that target specific therapeutic goals as determined by the occupational therapist. A reward system within the gamified activities aims to motivate continued engagement and adherence to therapeutic activities. Additionally, these gamified activities will serve as tools to increase patient engagement that will be beneficial for the observations to accurately assess the patients. To measure the effectiveness, gathering feedback through regular surveys that address various aspects of the experience will be crucial in gaining the right information.
- **Increase the volume of patients after deploying the proposed system for a year by 20%.** This will be achieved through the development of a user-friendly and informative website for the clinic to increase online visibility and searchability. Additionally, a more efficient streamline of the business process subsequently increases the number of patients the clinic can handle. To measure this goal, data of the number of patients before the implementation of the proposed system will be compared to after the implementation.

This objective directly addresses the limitations of the clinic's current manual system by improving efficiency, increasing patient engagement, and facilitating online appointment scheduling and information access. It aligns with Ms. Francisco's vision of expanding her reach and creating a more accessible and engaging therapy experience.

1.4 Significance of the Project

If the proposal is approved, the client will have more opportunities to assist people that requires the services that she provides. Due to this wider scope of potential patients, the client's revenue may also increase significantly. Utilizing the technologies involved in the project, such as AR, will help the business to evolve and be ready for the near future. Aside from the benefits already mentioned, the professionals in the clinic will also have their workload lessened. The

automation of patient scheduling and reminders will be an impactful event as the client stated their current struggles regarding the matter.

The proposed project aligns with the third Sustainable Development Goal (SDG): “Ensure healthy lives and promote well-being for all at all ages”. If implemented, people outside the clinic’s geographical location can benefit from its services, creating more accessible health services. Therapro clinic may have niche patients when compared to other medical facilities such as hospitals or dental clinics, but the importance of healthcare access is crucial to all. The proposed project also aims to educate people about occupational therapy, specifically about its difference to physical therapy. Spreading useful information and awareness to the community also aligns with the mentioned SDG goal. The following groups of people will benefit from the project if implemented:

- **Patients.** Aside from the standard face to face therapy sessions, patients can also experience the immersive environment that AR brings.
- **Parents and Guardians.** Since the business’ primary patients are children, having a portal that presents their progress in an organized manner will greatly benefit their parents or guardians. Having digitalized records also improves ease of access when compared to physical files.
- **Therapists.** Having more selections of activities to assign allows the therapist to accurately target specific skills that she thinks a patient needs improvement on. The automation of processes will also improve efficiency and allows the therapist to focus more on other important tasks.
- **Researchers.** Future researchers may also benefit in the result of this project as it contributes to the larger body of knowledge. Topics such as the involvement of AR in gamified activities and occupational therapy can be improved with the approval of the project with proper data gathering techniques.

1.5 Scope and Limitations

The project aims to develop a web portal to streamline Therapro Therapy Clinic’s operations and enhance the patient experience. This system will address the limitations of the clinic’s current manual processes and create a more engaging experience for both therapist and patients.

The web portal will serve as a hub for the system and the online AR games. Patients and guardians can schedule appointments directly through the web portal. This online system will save valuable time for Ms. Fransico and the patients. This will also serve as a secure platform to access and manage patient information. This eliminates the need for paper records, improving efficiency and data security.

This portal will also hold the gamified activities designed to complement clinic therapy sessions. These games will target specific therapeutic goals determined by the occupational therapist, making therapy more fun and engaging for children. A built-in progress tracking system will allow patients and guardians to visualize the patients’ development over time. This provides instant gratification and a sense of accomplishment that will further motivate patients to adhere to therapeutic activities.

The tools and technologies that will be used in project development would include the following:

- **Design and development.** Figma will be crucial in brainstorming, prototype creation, and ensuring a user-friendly design for the web portal. Development will utilize tools like VScode as the primary coding environment that will utilize different programming languages that will be used for this project.
- **Secure infrastructure.** The system will be hosted on Amazon Web Services (AWS) Lightsail. This cloud-based platform ensures the safety of patient information within the web portal. Additionally, a secure database, such as MongoDB or Apache MySQL, will be implemented to manage patient data effectively.
- **Seamless integration.** Application Programming Interfaces (APIs) will be utilized to integrate appointment scheduling functionalities within the web portal. This allows for a smooth and efficient scheduling process.

Since the project would only be focusing on occupational therapy and will be specifically designed for Therapro Therapy Clinic's services. The gamified activities and functionalities within the portal will cater to the unique needs of children receiving occupational therapy.

Core features of the portal like the gamified activities, the appointment scheduling, and others will require an internet connection. So, this system will need a stable connection for the users to access and utilize it. This project would also not include features like video conferencing. The focus remains on enhancing the therapeutic experience and providing supplementary tools for therapists and patients.

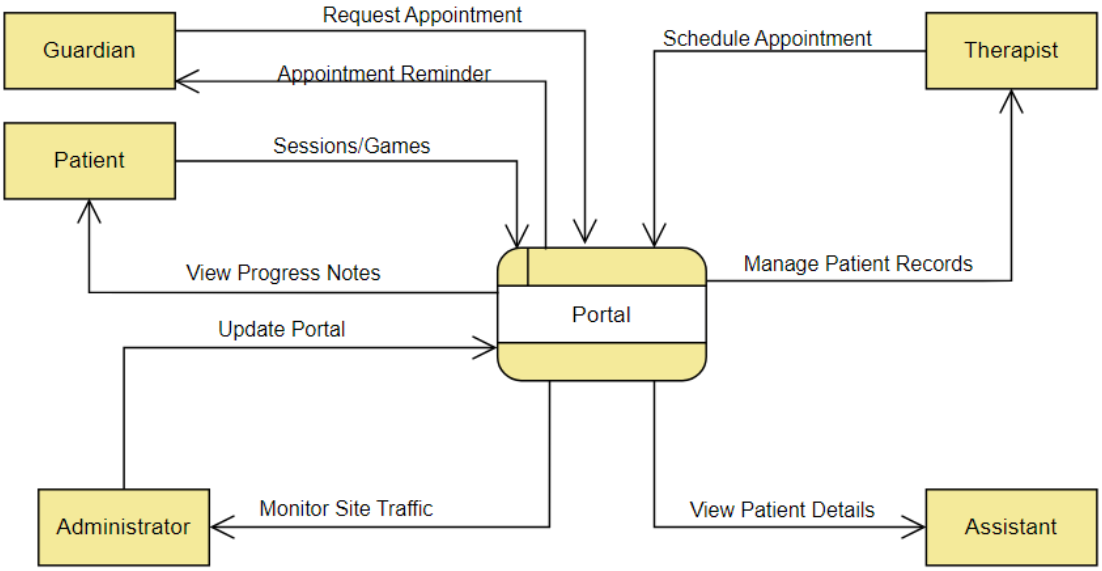
The initial phase of the system will not integrate a contactless payment system; however, future iterations may explore this possibility.

With this set of deliverables and tools, Therapro Therapy Clinic will be well-equipped to streamline operations, improve patient engagement, and expand its reach within the community. The project prioritizes security and scalability to ensure long-term growth and success for the clinic.

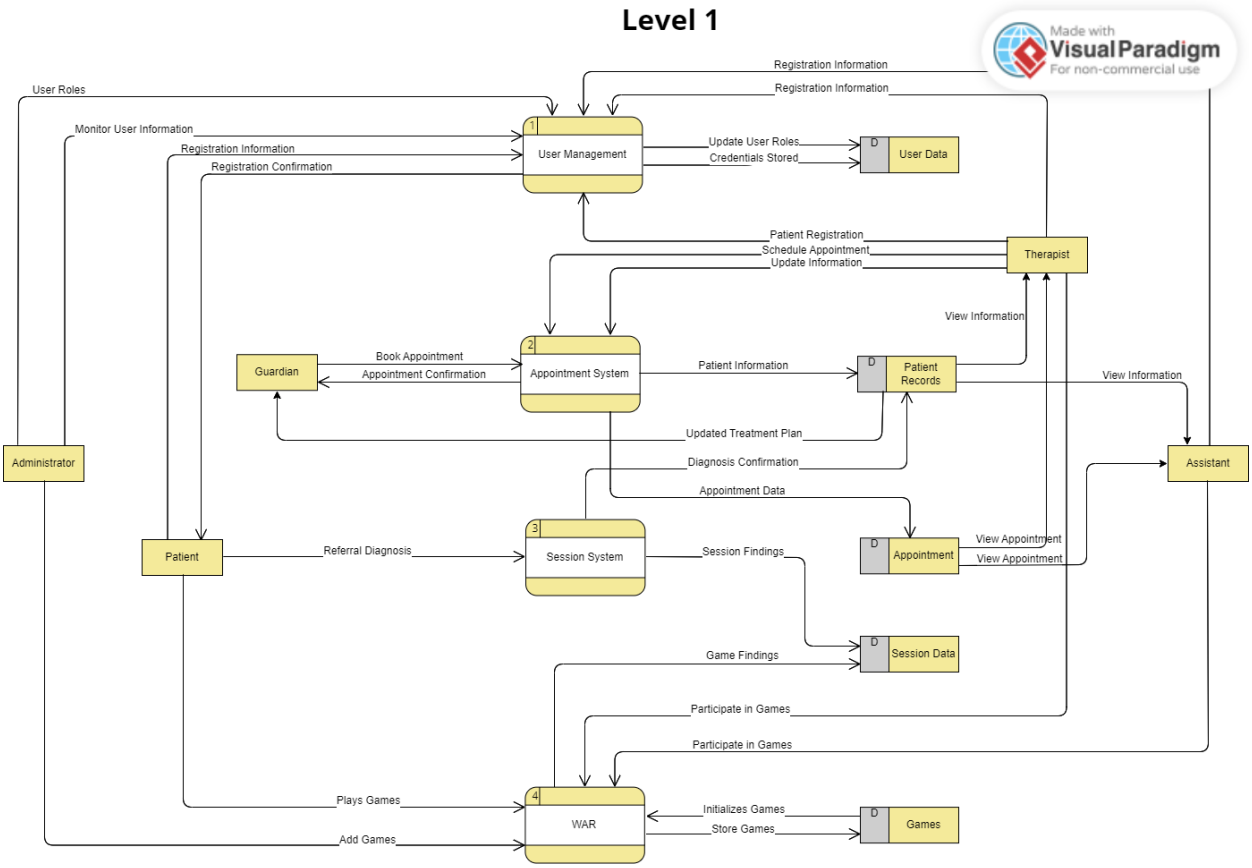
II. Requirements Analysis

2.1 Data Flow Diagram

2.4.1 DFD Level 0

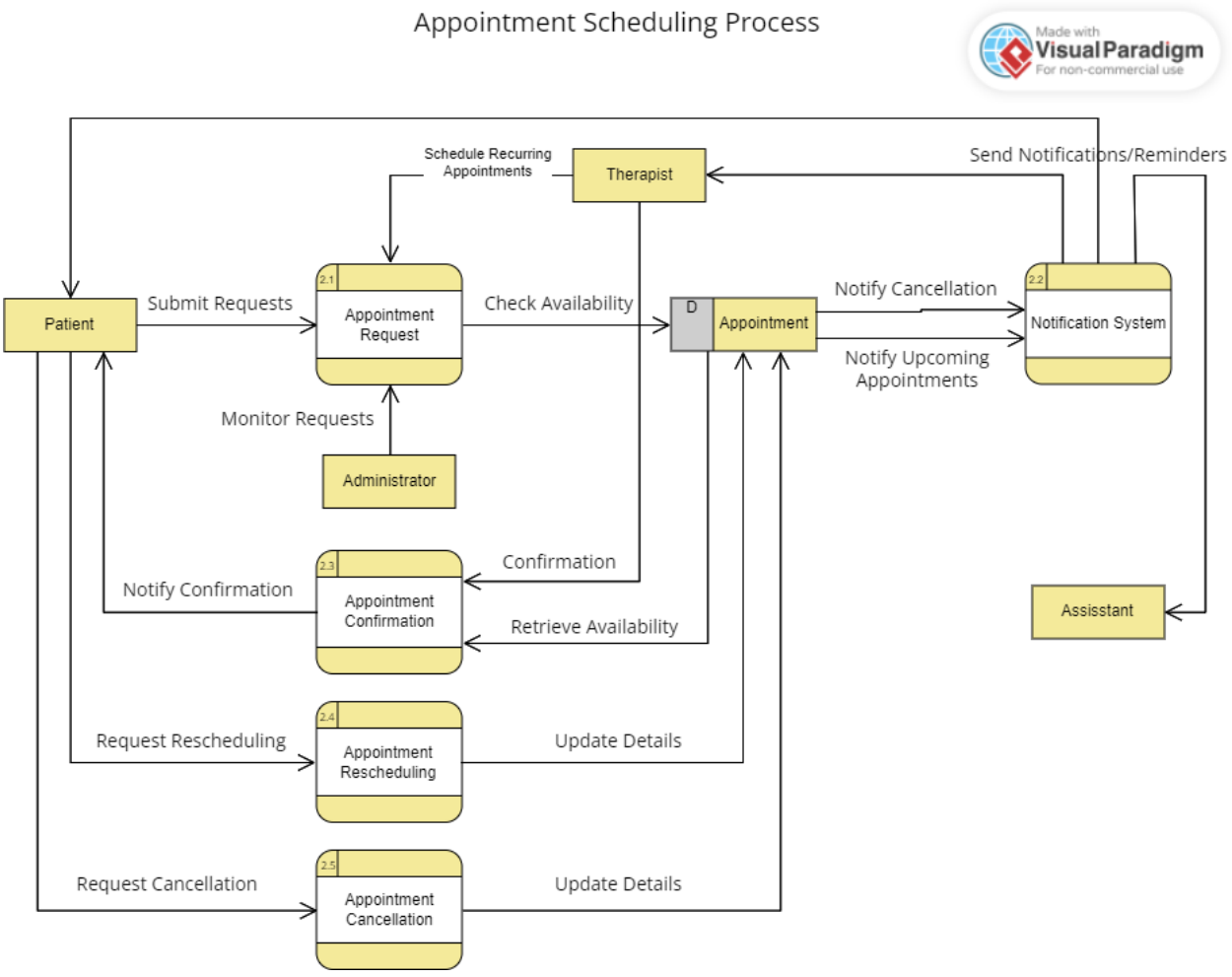


2.1.2 DFD Level 1

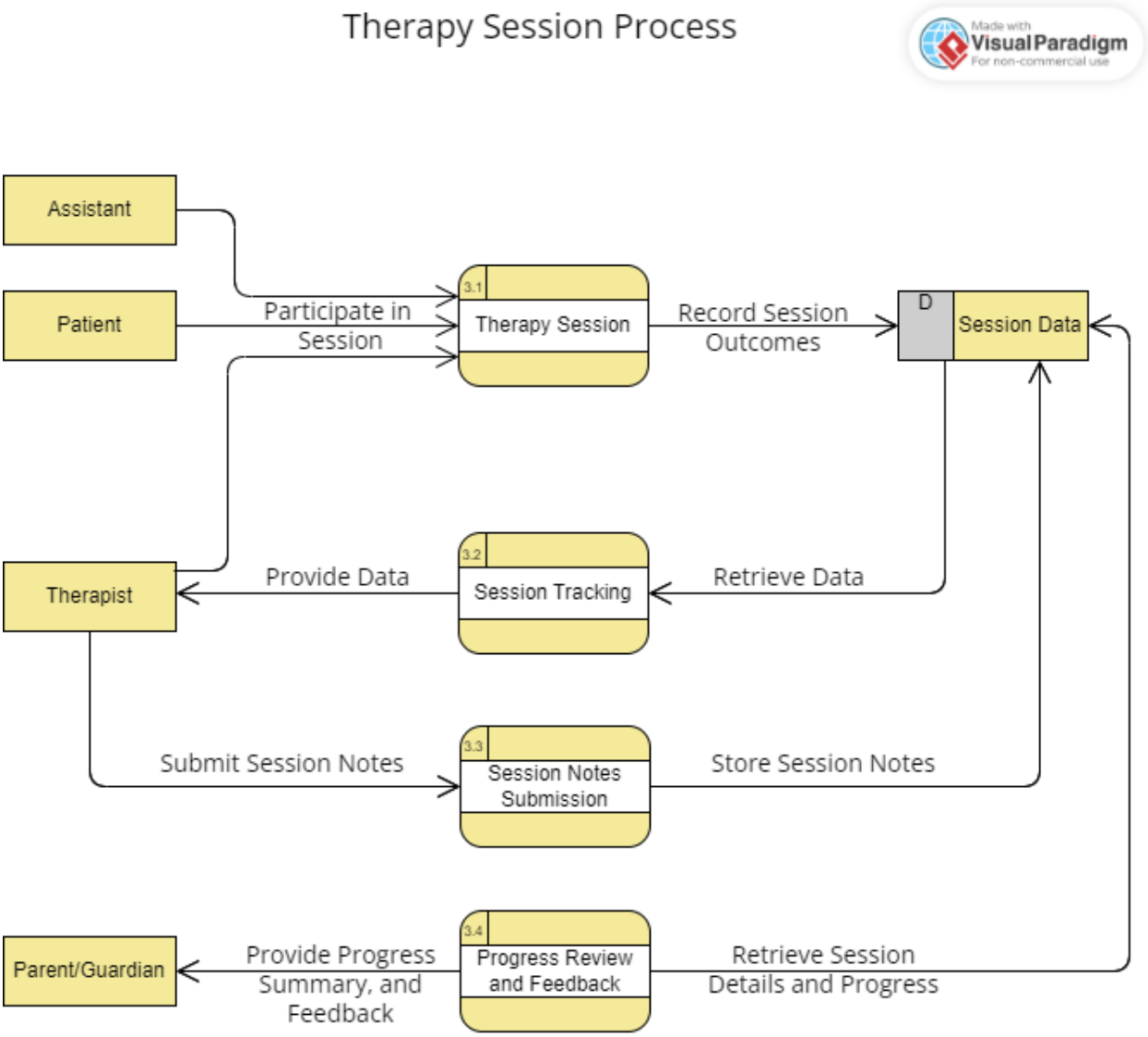


2.1.3 DFD Level 2

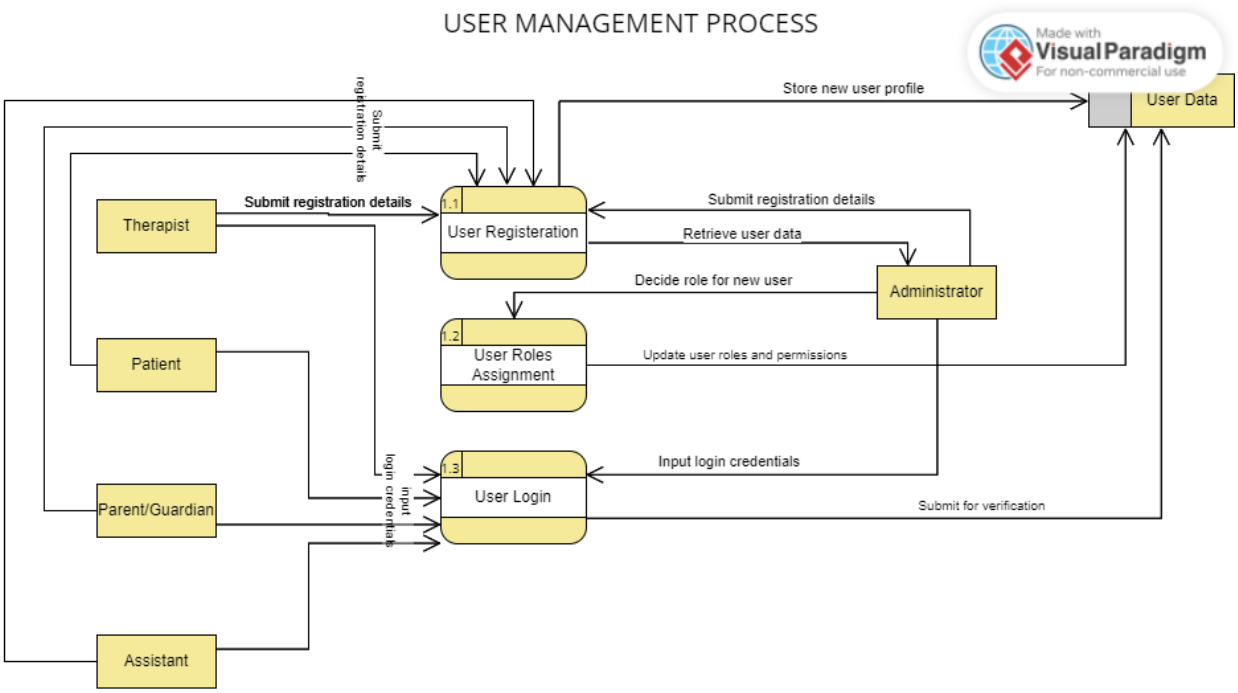
a. Appointment



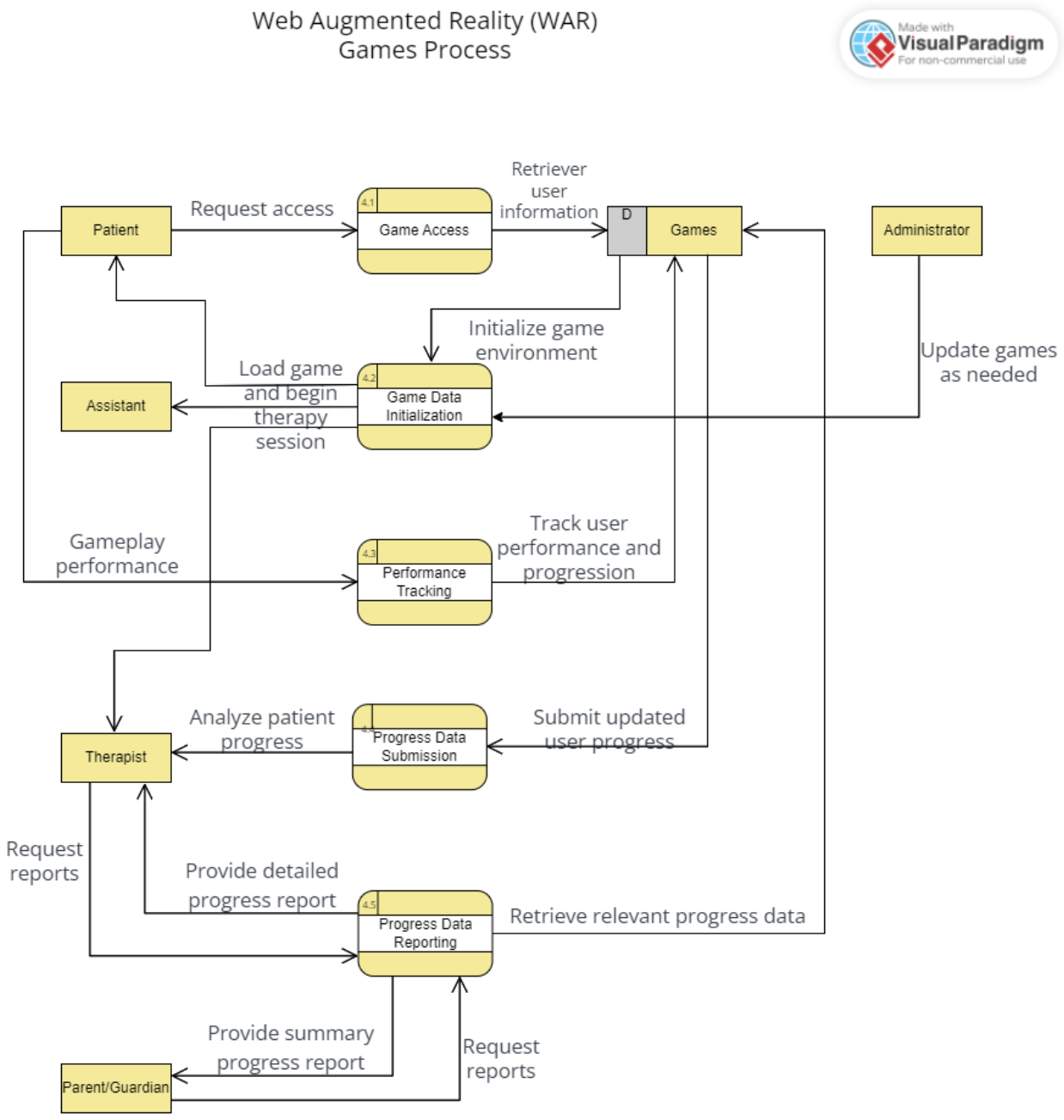
b. Therapy Session



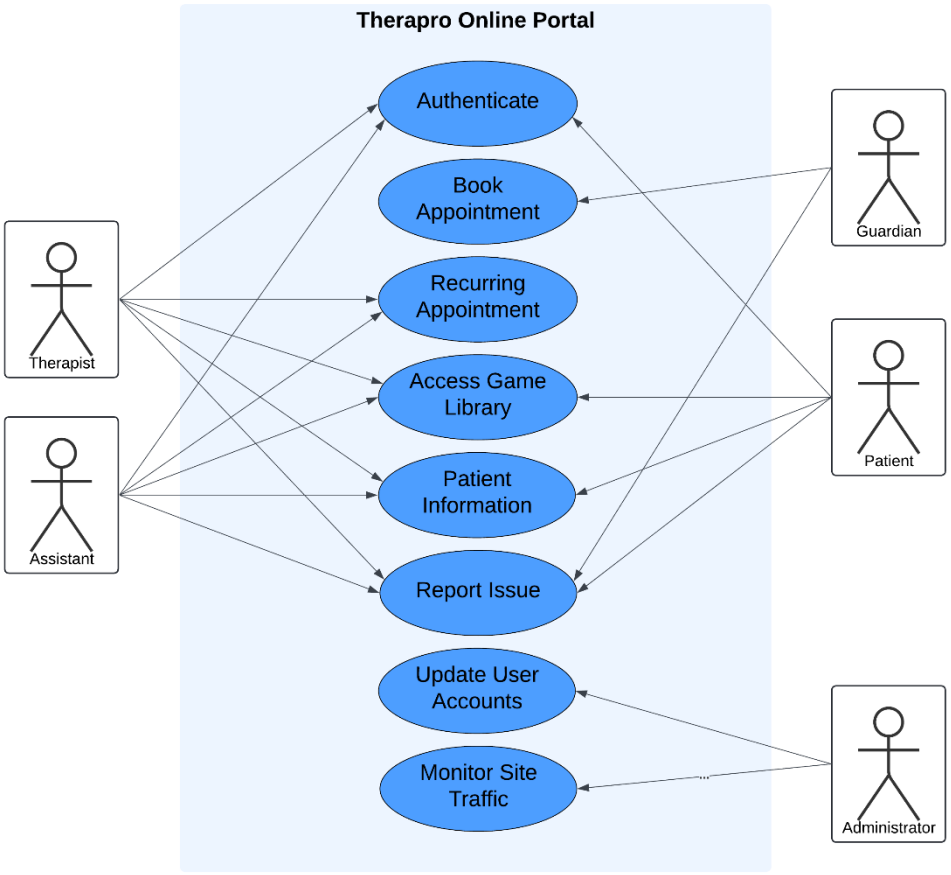
c. User Management


USER MANAGEMENT PROCESS
Made with VisualParadigm For non-commercial use
Store new user profile
User Data
Submit registration details
Therapist
Submit registration details
1.1
User Registeration
Submit registration details
Retrieve user data
Administrator
Decide role for new user
Patient
1.2
User Roles Assignment
Update user roles and permissions
Input login credentials
1.3
User Login
Parent/Guardian
Submit for verification
Assistant

d. W.A.R. Games



2.2 Use Case Diagram



2.3 Fully Dressed Use Cases

Use Case ID:	UC 01
Use Case Name:	Authenticate
Created By:	Mon David Olarte
Date Created:	9/11/24
Description:	This use case
Primary Actor:	User (Patient, Guardian, Therapist, Admin)
Secondary Actor:	None
Include use cases:	User Registration (UC 01A) and User Login (UC 01B)
Preconditions:	• The system is online and accessible • User has access to an internet browser • User is logged in

Postconditions:	**Success**: The user is successfully authenticated, either by creating a new account or logging into an existing account. **Failure**: The user receives an appropriate error message (e.g., invalid credentials, duplicate email) and is not granted access to the system.
Triggers:	• The user is accessing the system and either needs to create an account (register) or log in to an existing account.
Main Flow:	1. User accesses the authentication page. 2. System presents the user with two options: "Register" for new users or "Log in" for returning users. 3. User selects either the "Register" or "Log in" option.
Alternate Flow:	
Special Requirements	• The system should support secure authentication (e.g., password encryption, multi-factor authentication if needed). • The system must handle forgotten passwords and email verification efficiently to avoid authentication delays.
Assumptions	• Users have access to a valid email address and internet access to complete the registration process and or login.

Use Case ID:	UC 01A
Use Case Name:	User Registration
Created By:	Jan Michael Villeza
Date Created:	8/21/24
Description:	This use case allows the therapist to register a new patient for an account in the clinic portal to have more access to its facilities.
Primary Actor:	Patient, Guardian, Therapist, Admin
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The user does not have an existing account in the system. • The system is online and accessible.
Postconditions:	**Success:** The user is successfully registered, and a confirmation email is sent to verify their email address. **Failure:** The user is notified of the failure reason (e.g., duplicate email, missing information) and prompted to correct and resubmit.
Triggers:	• The therapist needs to create a new account for a patient to access therapy services.

Main Flow:	1. User navigates to the register new patient page on their dashboard.
	2. System prompts the user to enter required registration details, including:
	  a. Name
	  b. Email address
	  c. Password (with security criteria)
	  d. Role selection (Patient, Guardian, Therapist, Admin)
	3. User submits the registration form.
	4. System validates the provided information, ensuring all required fields are filled, the email is not already registered, and the password meets security standards.

	5. System creates the user account and sends a confirmation email to the provided address. 6. User receives the confirmation email and clicks the link to verify their email. 7. System verifies the email address and activates the user account. 8. User registration is completed, and the user is notified of the successful registration.
Alternate Flow:	**4a. Duplicate Email:** 1. If the user enters an email that is already registered in the system, the system notifies the user. 2. The user is prompted to log in instead or use a different email. **5a. Email Not Received:** 1. If the user does not receive the confirmation email, the system provides an option to resend the verification link. 2. User clicks the link to request the confirmation email again and proceeds with email verification.
Special Requirements	• The system must enforce password security requirements (e.g., minimum length, special characters). • Email delivery should be reliable, and verification links must have an expiration period (e.g., 24 hours).
Assumptions	• Users have access to a valid email address and internet access to complete the registration process.

Use Case ID:	UC 02
Use Case Name:	User Login
Created By:	Jan Michael VIlleza
Date Created:	8/21/24
Description:	This use case allows the user to log in to their registered account to access more of the portal's features
Primary Actor:	Guardian, Therapist, Clinic Admin
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The user has a registered account in the system. • The system is online and accessible.
Postconditions:	**Success**: The user is authenticated and logged into the system, gaining access to the appropriate dashboard. **Failure**: The user is notified of the failure reason (e.g., incorrect credentials, locked account) and prompted to retry or recover their account.
Triggers:	• A user wishes to access their account by logging in.
Main Flow:	1. **User navigates to the login page** from the homepage.

	2. **System prompts the user** for their email address and password. 3. **User enters their credentials** and submits the form. 4. **System validates the credentials**, checking for a matching account and correct password. 5. **System authenticates the user** and grants access to the appropriate dashboard (Patient, Therapist, Guardian, or Admin). 6. **User is redirected to their dashboard**, where they can access relevant services and information.
Alternate Flow:	**4a. Invalid Credentials**: 1. If the user enters incorrect email or password, the system notifies the user of the invalid credentials. 2. The user is given the option to retry or reset their password. **4b. Forgot Password**: 1. User selects the "Forgot Password" option on the login page. 2. System prompts the user to enter their registered email address. 3. System sends a password reset link to the provided email address. 4. User clicks the link, resets their password, and returns to the login page. 5. User logs in with the new password. **4c. Account Locked**: 1. If the user fails to log in after several attempts, the system may lock the account. 2. System notifies the user that the account is locked and provides instructions to unlock the account (e.g., via email verification or contacting support).
Special Requirements	• Passwords must be securely hashed and encrypted. • The system should allow for multiple unsuccessful login attempts before locking the account. • The password reset process should include secure validation (e.g., tokenized reset links).
Assumptions	• Users have registered accounts and valid login credentials. • Users can access their registered email to receive password reset links if needed.

Use Case ID:	UC 03
Use Case Name:	Book Appointment
Created By:	Liam Miguel Supremo
Date Created:	8/29/24
Description:	This use case allows patients and guardians to book an appointment with a therapist through the online portal.
Primary Actor:	User (Guardian, Patient)
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The system is online and accessible

	• The therapist's schedule must be available in the system. • Guardian must be on the Therapro Online Portal. • User has access to an internet browser
Postconditions:	**Success:** The appointment is successfully booked, and a confirmation notification is sent to the User. **Failure:** The user is notified of the failure reason (e.g., selected time slot no longer available) and prompted to correct and resubmit.
Triggers:	• User wants to book an appointment with a therapist.
Main Flow:	1. User accesses the Therapro Online Portal. 2. User navigates to the "Book Appointment" section. 3. System displays the list of available schedule of the therapist. 4. User selects an available time slot. 5. User enters their contact information (e.g., name, email, phone number) and confirms the booking details. 6. System validates the provided information and ensures the selected time slot is still available. 7. System saves the appointment and updates the therapist's schedule. 8. System sends a confirmation notification to the user via email or SMS. 9. User can view the appointment details via the confirmation notification.
Alternate Flow:	**5a. Incomplete Contact Information:** 1. If the user does not provide all required contact information, the system prompts them to fill in the missing details. 2. The user provides the necessary information. **6a. System Error:** 1. If the system encounters an error while saving the appointment, it displays an error message to the user. 2. The user is asked to try booking the appointment again later or contact support.
Special Requirements	• The system must prevent double booking of the same time slot. • The appointment booking process should be simple and user-friendly. • The system should be accessible on both desktop and mobile devices.
Assumptions	• User has access to a valid email address or phone number to receive appointment confirmation. • User has internet access to complete the appointment booking process.

Use Case ID:	UC 04
Use Case Name:	Appointment Management
Created By:	Jan Michael Villeza
Date Created:	8/24/24
Description:	This use case allows the user to manage their appointments, checking if it is available or has conflicts with other patients.
Primary Actor:	Therapist, Guardian

Secondary Actor:	None
Include use cases:	None
Preconditions:	• The user has basic information required for booking (e.g., patient name, contact information). • System has available therapy slots.
Postconditions:	**Success**: The appointment is scheduled, rescheduled, or canceled, and both the user and the therapist receive confirmation. **Failure**: The user is notified of the failure reason (e.g., no available slots, conflicting appointment) and prompted to try again.
Triggers:	• A user wants to modify a therapy appointment.
Main Flow:	1. User navigates to their appointment calendar on the portal. 2. System displays user's existing appointments. 3. User selects an available slot for recurring appointments and clicks "Schedule Appointment." 4. System confirms the selected slot and prompts the user for final confirmation. 5. Therapist confirms the appointment. 6. System schedules the appointment, updates the calendar, and sends notifications to both the user and the therapist. 7. User receives appointment confirmation, which includes the date, time, and therapist details.
Alternate Flow:	**6a. Reschedule Appointment**: 1. User navigates to the reschedule option on the appointment page. 2. System prompts the user for the existing appointment details (e.g., confirmation number, contact info). 3. System displays available slots for rescheduling. 4. User selects a new slot and confirms the rescheduled appointment. 5. System updates the appointment and sends notifications to both the user and the therapist. **6b. Cancel Appointment**: 1. User navigates to the cancellation option on the appointment page. 2. System prompts the user for the existing appointment details (e.g., confirmation number, contact info). 3. User confirms cancellation. 4. System removes the appointment from both the user and therapist's calendars and sends cancellation notifications.
Special Requirements	• The system must ensure data security and prevent unauthorized access to appointment information. • Notifications (email/SMS) must be timely and accurate.
Assumptions	• Therapists have entered their availability into the system. • Users can access the appointment scheduling feature and provide valid contact information.

Use Case ID:	UC 05
Use Case Name:	Recurring Appointments
Created By:	Jan Michael Villeza
Date Created:	8/24/24
Description:	This use case allows the therapist to schedule recurring appointments for the patient as part of their treatment plan.
Primary Actor:	Therapist, Assistant
Secondary Actor:	Guardian
Include use cases:	None
Preconditions:	• The patient has completed their **initial appointment** with the therapist. • The therapist has access to the system to schedule appointments. • The system is online and capable of scheduling recurring appointments.
Postconditions:	**Success:** Recurring appointments are successfully scheduled for the patient over the next 6 months, and reminders are sent to both the guardian and therapist before each session. **Failure:** If scheduling fails, an appropriate error message is displayed, and the appointments are not set.
Triggers:	• After the initial appointment, the therapist decides that the patient requires recurring therapy sessions. • The assistant sends reminders before each session based on the configured schedule.
Main Flow:	1. Therapist logs into the system after the initial appointment with the patient. 2. Therapist coordinates with the guardian of the patient to determine the most suitable times for recurring appointments. 3. Therapist selects the option to schedule recurring appointments for the patient in the system. 4. Therapist enters the recurrence details, specifying the duration (e.g., 6 months) and the frequency of appointments (e.g., weekly). 5. Therapist reviews available time slots based on their schedule and the parent's/guardian's preferences. 6. Therapist confirms the recurring appointments in the system, which are scheduled automatically. 7. System saves the appointments and updates the therapist's schedule with the recurring appointments for the patient. 8. Assistant manages and adjusts reminders as needed after the appointment is scheduled. 9. System sends a notification to both the therapist and the guardian, confirming the scheduled recurring appointments.
Alternate Flow:	
Special Requirements	• The system must handle recurring appointments efficiently and prevent scheduling conflicts over a long-term period (e.g., 6 months). • The system must send reminders automatically at predefined intervals (e.g., 24 hours or 48 hours before each appointment).

Assumptions	• Therapists have entered their availability into the system. • Assistant has access to valid contact information for the guardian and therapist to send reminders. • Users can access the appointment scheduling feature and provide valid contact information.

Use Case ID:	UC 06
Use Case Name:	View Appointments
Created By:	Jan Michael Villeza
Date Created:	8/24/24
Description:	This allows the user to view their scheduled appointments or the appointments of all patients, depending on their role.
Primary Actor:	Patient, Guardian, Therapist, Clinic Admin
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The user has an account and is logged into the system. • The user has scheduled appointments in the system.
Postconditions:	• **Success**: The user views their upcoming and past appointments with relevant details. • **Failure**: The user is notified if there are no appointments found.
Triggers:	• A user wants to check their scheduled or past appointments.

Main Flow:	1. User navigates to the appointment calendar
	2. System retrieves all upcoming and past appointments associated with the user.
	3. System displays the appointments list and details including:
	  ○ Date and time of each appointment
	  ○ Therapist's name
	  ○ Appointment type (e.g., virtual or in-person)
	  ○ Status (e.g., upcoming, completed, canceled)
	4. User reviews the appointments and can click on individual appointments for more details if needed.

Alternate Flow:	**3a. No Appointments Found**: 1. If the user has no upcoming or past appointments, the system notifies the user that no appointments are found. 2. The user is given the option to schedule a new appointment.
Special Requirements	• The system should display appointment information in a user-friendly format, with clear distinctions between upcoming, past, and canceled appointments. • The user should be able to easily navigate to other options, such as rescheduling or canceling an appointment.
Assumptions	• The user has previously scheduled appointments, and they are recorded in the system. • The system can retrieve and display appointment data in real-time.

Use Case ID:	UC 07
Use Case Name:	Access Game Library
Created By:	Liam Miguel Supremo
Date Created:	8/24/24
Description:	This use case allows logged in users to access the game library.
Primary Actor:	Player (Patient, Guardian, Therapist, Assistant)
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The player has access to the game library. • The player has an existing account.
Postconditions:	**Success:** • The game has successfully launched. • The progress and activity of the player are saved. **Failure:** • The game was not added or removed from the game library due to an error and receives an appropriate error message. • The game could not be launched due to missing files or updates, the player is informed.
Triggers:	• The player wants to browse or play a game from their library.
Main Flow:	1. The player selects the “Game Library” section from the main menu. 2. Browse Games: a. 3a. The player views the list of games available in the game library. b. 3b. The player can search for specific games using the search bar. 3. Play a Game: a. 4a. The player selects a game from the game library. b. 4b. The player clicks “Play” to start the game. 4. The system records the player’s actions, such as tracking the number of times each game is played.
Alternate Flow:	**2a. Player Not Logged In:** 1. If the player is not logged in, the system redirects them to the login page. 2. The player enters their credentials and is granted access to the game library. **4a. Network Failure:** 1. If there is a network failure during gameplay, the system attempts to reconnect and notify the player.
Special Requirements	• The game library must support multiple platforms (PC and mobile) and sync across them. • The system must handle large libraries efficiently, with quick search and filtering capabilities.
Assumptions	• The player has a stable internet connection for browsing and playing games online. • The player has access to a PC or mobile phone.

Use Case ID:	UC 08
Use Case Name:	Patient Information
Created By:	Mon David Olarte
Date Created:	9/12/24
Description:	This use case allows the user to navigate and access patients' information, including records and progress notes. The content accessible will be dependent on the user's role.
Primary Actor:	Therapist, Assistant, Member
Secondary Actor:	None
Include use cases:	Patient Records and Patient Progress Notes.
Preconditions:	• The system is online and accessible. • User is logged in
Postconditions:	**Success:** Correct scope of information is accessed and editable **Failure:** An error will be displayed, notifying the user that the system failed to retrieve patient information.
Triggers:	1. Members wants to view or edit their information. 2. Therapist and Assistant wants to view the information of a specific patient. 3. Therapist wants to edit the information of a specific patient.
Main Flow:	1. User accesses patient information a. Patient records b. Patient progress notes
Alternate Flow:	None
Special Requirements	• System must comply with data privacy regulations to ensure that no sensitive information will be exposed to unauthorized personnel. • System must have the capability to assign roles to users and grant them the correct permissions.
Assumptions	• User has a stable internet connection. • User can navigate simple UI elements such as buttons and links.

Use Case ID:	UC 08A
Use Case Name:	Access Patient Records
Created By:	Mon David R. Olarte
Date Created:	9/13/2024
Description:	This use case specifically tackles the option of accessing patient records. Available information will be based on the role of the user.
Primary Actor:	Member, Therapist, Assistant
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The system is online and accessible. • User is logged in
Postconditions:	**Success**: The user successfully accesses patient records.

	Failure: The system fails to access or save the changes made to the patient records due to a system error or invalid data, and an error message is displayed to the user.
Triggers:	1. Member wants to view or edit his/her records. 2. Therapist of Assistant wants to view a specific patient's records. 3. Therapist wants to view or edit the records of a specific patient.
Main Flow:	1. System displays the information and grants permissions based on the user's role a. **Member:** The system displays only the member's personal records. b. **Therapist/Assistant:** The system displays a list of all patients for them to choose from. 2. User views the information 3. User does his/her desired changes (if any) a. **Member:** Can only modify his/her own data b. **Therapist:** Can view and modify any patient record c. **Assistant:** Can view any patient record but cannot modify them. 4. System validates changes. 5. System saves changes and notifies the user.
Alternate Flow:	**1a. User is a Member** 1. System displays the member's personal records, which they can edit. 2. Member can only modify his/her own data **1b. User is a Therapist** 1. System displays a list of patients 2. Therapist selects a specific patient to access their records 3. Can view and modify ant patient record listed **1c. User is an Assistant** 1. System displays a list of patients 2. Assistant selects a specific patient to view their records 3. Can only view any patient records listed **1d. Patient Record Not Found:** 1. If the selected patient's record does not exist or cannot be found, the system displays an error message, notifying the user about the issue **3d. Edit Patient Record:** 1. User updates their chosen information. 2. User saves changes to the patient record. 3. System validates the changes. 4. System saves the changes and alerts the user about the changes. **4a. Invalid Data Entry:** 1. If the therapist enters invalid or incomplete data, the system prompts them to correct the errors before saving. **5a. System Error During Save:**

	1. If a system error occurs while saving, the system displays an error message, and the therapist's changes are not saved. The therapist is prompted to try again or contact support.
Special Requirements	• System must comply with data privacy regulations to ensure that no sensitive information will be exposed to unauthorized personnel. • System must have the capability to assign roles to users and grant them the correct permissions. • The system must have validations on input data
Assumptions	• User has a stable internet connection. • User can navigate simple UI elements such as buttons and links.

Use Case ID:	UC 08B
Use Case Name:	Access Patient Progress Notes
Created By:	Mon David R. Olarte
Date Created:	9/13/2024
Description:	This use case specifically tackles the option of accessing patient progress notes. Available information and permissions will be based on the role of the user.
Primary Actor:	Member, Therapist, Assistant
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The system is online and accessible. • User is logged in
Postconditions:	**Success**: The user successfully accesses patient progress notes **Failure**: The system fails to access or save the changes made to the progress notes due to a system error or invalid data, and an error message is displayed to the user.
Triggers:	1. Member wants to access his/her progress notes 2. Therapist or Assistant wants to view a specific patient's progress notes 3. Therapist wants to modify the progress notes of a specific patient
Main Flow:	1. System displays patient progress notes and grants permission based on the user's role a. **Member:** The system displays only the member's personal progress notes. b. **Therapist/Assistant:** The system displays a list of all patients for them to choose from. 2. User views the information 3. User does his/her desired changes (if any). a. **Member:** Can only modify his/her own data b. **Therapist:** Can view and modify any patient record c. **Assistant:** Can view any patient record but cannot modify them.

	4. System validates changes. 5. System saves the changes and notifies the user.
Alternate Flow:	**1a. User is a member** 1. System displays only their personal progress notes, which they can modify. **1b. User is a therapist** 1. System displays a list of patients 2. Therapist selects a specific patient to access their progress notes 3. Therapist can view and modify any patient progress note listed **1c. User is an assistant** 1. System displays a list of patients 2. Therapist selects a specific patient to view their progress notes 3. Assistant can view any patient record listed **1d. No Existing Notes:** 1. If there are no progress notes available for the user, informs them about the issue. **3a. Add Progress Note** 1. User clicks the “Add Progress Note” button. 2. User inputs the note details, such as session date, note title, and main content. 3. User confirms the content by saving the changes made. **3b. Edit Progress Note** 1. Therapist selects specific progress note. 2. Therapist selects the “Edit Progress Note” button. 3. System makes the information editable. 4. Therapist does his/her desired changes. **3c. Delete Progress Note** 1. Therapist selects a specific progress note 2. Therapist selects “Delete Progress Note” 3. System displays a warning that the action cannot be undone 4. Therapist confirms the action 5. The specific progress note is deleted from the system. **4a. Invalid Data:** 1. If the system detects invalid data, it prompts the user to check their inputs. 2. User resubmits **4b. Incomplete Data** 1. If the system detects that the user input is incomplete, it marks the areas that need completion. 2. User completes their input 3. User resubmits **5a. System Error:** If the system encounters a technical issue while saving the notes, it displays an error message and logs the error for further investigation.

Special Requirements	• System must comply with data privacy regulations to ensure that no sensitive information will be exposed to unauthorized personnel. • System must have the capability to assign roles to users and grant them the correct permissions. • The system must have validations on input data
Assumptions	• User has a stable internet connection. • User can navigate simple UI elements such as buttons and links.

Use Case ID:	UC 09
Use Case Name:	Record Patient Progress
Created By:	Mon David Olarte
Date Created:	8/25/24
Description:	This use case describes the process by which a Therapist or Administrator records progress notes for patients within the system. This includes viewing, editing, deleting, and saving progress notes.
Primary Actor:	Therapist, Administrator
Secondary Actor:	None
Include use cases:	None
Preconditions:	• There are existing progress notes. • The system is online and accessible. • The therapist/administrator is logged in, granting them appropriate permissions.
Postconditions:	**Success**: The therapist or administrator can view, edit, delete, and save patients' progress notes. **Failure**: The system fails to save the progress notes due to a system error or invalid data, and an error message is displayed to the user.
Trigger:	• The therapist or administrator needs to update, review, or manage a patient's progress notes.
Main Flow:	1. User selects a patient from the list of patients in the system. 2. The system displays the patient's existing progress notes 3. User selects the option to view, edit, or delete the progress notes. 4. User saves the changes. 5. The system validates the changes and saves the updated progress notes. 6. The system confirms that the progress notes have been successfully updated and displays the updated information to the actor.
Alternate Flow:	**1a. No Existing Notes:** 2. If there are no progress notes for the selected session, the system informs the primary actor and provides an option to create new progress notes. **5a. Invalid Data:**

	3. If the system detects invalid or incomplete data, it prompts the primary actor to correct the errors and resubmit. **6b. System Error:** 1. If the system encounters a technical issue while saving the notes, it displays an error message and logs the error for further investigation.
Special Requirements	• System must comply with data privacy regulations to ensure that no sensitive information will be exposed to unauthorized personnel.
Assumptions	• User is able to navigate UI elements such as buttons and links. • A reliable internet connection is available to ensure the information displayed is up to date.

Use Case ID:	UC 10
Use Case Name:	View Progress Notes
Created By:	Mon David Olarte
Date Created:	8/25/24
Description:	This use case describes the process by which an Assistant or Member views progress notes for a specific patient session within the system. It includes steps for both user roles to access and read the notes.
Primary Actor:	Assistant, Member
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The assistant or member is logged into the system with appropriate access permissions. • The system is online and operational. • Progress notes for the patient are available in the system.
Postconditions:	**Success:** The assistant or member can successfully view the progress notes of the selected patient session. **Failure:** If the progress notes cannot be retrieved, an error message is displayed, and the notes are not shown.
Trigger:	• The assistant or member wants to view the progress notes for a specific patient session.
Main Flow:	1. User navigates to the progress notes window. 2. The system checks the role of the user: a. 2a. If the user is an assistant, the system displays a list of all patients. b. 2b. If the user is a member, the system displays his/her profile containing the notes 3. The system retrieves and displays the progress notes for the selected patient. 4. The user reads through the progress notes. 5. User returns to the menu.
Alternate Flow:	**2a. User is a member:** 1. The system displays his/her notes **2b. User is an assistant:** 1. The system displays the list of patients

	2. The assistant selects a specific patient from the list to view his/her notes **3a. No Progress Notes Available:** 1. If there are no progress notes available for the selected patient, the system informs the actor that no notes are available for viewing. **4a. System Error:** 1. If the system encounters an error while retrieving the progress notes, an error message is displayed, and the actor is advised to try again later or contact support.
Special Requirements	• The progress notes should be presented in a clear and readable format. • The system must ensure that only authorized users can access patient notes, respecting privacy and confidentiality.
Assumptions	• The assistant or member can navigate simple UI elements such as buttons and links • The system is properly secured to prevent unauthorized access to sensitive patient information.

Use Case ID:	UC 11
Use Case Name:	Manage Patient Records
Created By:	Mon David Olarte
Date Created:	8/25/24
Description:	This use case outlines the process by which a Therapist manages patient records within the system. This includes viewing, adding, editing, and deleting patient information, ensuring that the records are up to date and accurately maintained.
Primary Actor:	Therapist
Secondary Actor:	None
Include use cases:	None
Preconditions:	• Therapist is logged in to the portal. • System is online and operational. • The therapist has appropriate permissions to manage records (view, add, edit, delete).
Postconditions:	**Success:** The therapist can view, update, edit, and delete patient records, and all changes are saved to the system. **Failure:** An error will be displayed to the therapist containing the reason why the patient records cannot be accessed.
Trigger:	• The Therapist needs to access to a patient's record.
Main Flow:	5. Therapist navigates to the list of patients. 6. System displays a list of all patients. 7. Therapist selects a specific patient to manage their records. 8. System retrieves and displays the patient’s records. 9. Therapist updates chosen information. 10. Therapist saves changes to the patient record 11. System validates the changes and confirms that the changes were made successfully.

Alternate Flow:	**4a. Patient Record Not Found:** • If the selected patient's record does not exist or cannot be found, the system displays an error message, and the therapist may need to verify the patient's details or contact system support. **5a. Invalid Data Entry:** 2. If the therapist enters invalid or incomplete data, the system prompts them to correct the errors before saving. **6a. System Error During Save:** 1. If a system error occurs while saving, the system displays an error message, and the therapist's changes are not saved. The therapist is prompted to try again or contact support.
Special Requirements	• The system should have audit logging to track changes made to patient records, including who made the changes and when. • The interface should be user-friendly, allowing therapists to quickly access and update patient records.
Assumptions	• User is able to navigate UI elements such as buttons and links. • A reliable internet connection is available to ensure the information displayed is up to date.

Use Case ID:	UC 12
Use Case Name:	Report Issue
Created By:	Mon David Olarte
Date Created:	8/25/24
Description:	This use case describes the process by which a Therapist, Assistant, or Member reports an issue related to the system. It involves the steps to fill out, submit, and confirm the submission of the issue report.
Primary Actor:	Therapist, Assistant, Member
Secondary Actor:	None
Include use cases:	None
Preconditions:	• System is available and online. • User is logged in to the portal. • User has an issue related to the system.
Postconditions:	**Success:** The issue reported will be submitted to the system and a confirmation will be displayed. **Failure:** An error will be displayed to the user containing the reason why the report was not submitted.
Trigger:	• A user wants to report an issue that they know/encountered.
Main Flow:	1. User selects the option to report an issue from the main menu or dashboard. 2. The system prompts the user to fill out an issue report form. 3. User completes the form with the necessary details. 4. User submits the issue report. 5. The system validates the submitted information. 6. The system saves report. 7. The system displays a confirmation message to the user.
Alternate Flow:	**2a. Incomplete Form:**

	1. If the user submits the form without filling in all required fields, the system highlights the missing fields and prompts the user to complete them before resubmitting. **5a. Invalid Data:** 1. If the system detects invalid data, it notifies the actor of the specific error and requests corrections. **6a. System Error:** 1. If the system encounters an error while saving the issue report, an error message is displayed, and the report is not submitted. The system logs the error for further investigation.
Special Requirements	• The system must comply with data privacy. • User has the capability to explain or describe the issue.
Assumptions	• User is logged in.

Use Case ID:	UC 13
Use Case Name:	Update User Accounts
Created By:	Kai Butalid
Date Created:	8/24/24
Description:	This use case describes the process by which the Administrator manages user accounts within the system, including editing or deleting and setting permissions for user accounts.
Primary Actor:	Administrator
Secondary Actor:	None
Include use cases:	Edit User Account (UC 13A), Delete User Account (UC 13B) and Set User Permissions (UC 13C)
Preconditions:	• The Administrator is logged into the system with the necessary privileges to manage user accounts. • Users (Therapist, Patient, Assistant, Guardian) are registered in the system.
Postconditions:	**Success:** The user accounts are successfully managed (edited, deleted, or permissions set). **Failure:** • The user account was not updated or deleted due to a system error or invalid input. • No changes are made to the user accounts list.
Trigger:	• The administrator needs to manage user accounts to ensure correct information, deactivate or delete accounts, or adjust user permissions in the portal system.
Main Flow:	1. Administrator navigates to the "User Management" section. 2. Administrator selects the "Manage User Account" option. 3. System displays a list of all users (Therapist, Patient, Assistant, Guardian) with options to edit, delete, or set permissions for each user.
Alternate Flow:	**2a. System Error:** 1. If the system encounters an error and fails to load the "Manage User Account" page, it displays an error message to the Administrator.

	2. The Administrator is asked to refresh the page or try again later.
Special Requirements	• The system must ensure that user data is handled securely during account management.
Assumptions	• The Administrator has the necessary privileges to manage all aspects of user accounts. • Users are aware that their accounts may be managed by an administrator and understand the implications.

Use Case ID:	UC 13A
Use Case Name:	Edit User Account
Created By:	Kai Butalid
Date Created:	9/11/24
Description:	This use case describes the process by which the Administrator edits user accounts within the system.
Primary Actor:	Administrator
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The Administrator is logged into the system with the necessary privileges to manage user accounts. • Users (Therapist, Patient, Assistant, Guardian) are registered in the system. • The Administrator is in the “Manage User Account” page.
Postconditions:	**Success:** The user accounts are successfully edited. **Failure:** • The user account was not updated due to a system error or invalid input. • No changes are made to the user accounts list.
Trigger:	• The administrator needs to manage user accounts to ensure correct information.
Main Flow:	1. System displays a list of all users (Therapist, Patient, Assistant, Guardian). 2. Administrator selects a user and chooses the "Edit" option. 3. System displays the editable fields for the user, such as name, email, contact information, and role. 4. Administrator updates the user details as needed. 5. Administrator submits the changes. 6. System validates the new information and updates the user account in the database. 7. System confirms the update and notifies the administrator.
Alternate Flow:	**4a. Invalid User Information:** 1. If the administrator enters invalid information (e.g., incorrect email format, missing required fields), the system notifies the administrator. 2. Administrator is prompted to correct the information and resubmit.
Special Requirements	• The system must ensure that user data is handled securely during account management.

Assumptions	• The Administrator has the necessary privileges to manage all aspects of user accounts. • Users are aware that their accounts may be managed by an administrator and understand the implications.

Use Case ID:	UC 13B
Use Case Name:	Delete User Account
Created By:	Kai Butalid
Date Created:	9/11/24
Description:	This use case describes the process by which the Administrator deletes user accounts within the system.
Primary Actor:	Administrator
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The Administrator is logged into the system with the necessary privileges to manage user accounts. • Users (Therapist, Patient, Assistant, Guardian) are registered in the system. • The Administrator is in the “Manage User Account” page.
Postconditions:	**Success:** The user accounts are successfully edited. **Failure:** • The user account was not updated due to a system error or invalid input. • No changes are made to the user accounts list.
Trigger:	• The administrator needs to delete user accounts to deactivate or delete accounts.
Main Flow:	1. System displays a list of all users (Therapist, Patient, Assistant, Guardian). 2. Administrator selects a user and chooses the "Delete" option. 3. System prompts the administrator to confirm the deletion. 4. Administrator confirms the deletion. 5. System checks for any dependencies or data related to the user (e.g., scheduled sessions, assigned tasks). 6. System deletes the user account and all associated data or reassigns dependencies as necessary. 7. System confirms the deletion and notifies the administrator.
Alternate Flow:	**5a. Deletion Conflict:** 1. If the user being deleted has active dependencies (e.g., scheduled sessions or tasks), the system notifies the administrator of the conflict. 2. Administrator is prompted to reassign or cancel dependencies before proceeding with deletion.
Special Requirements	• The system must ensure that user data is handled securely during account management.

Assumptions	• The Administrator has the necessary privileges to manage all aspects of user accounts. • Users are aware that their accounts may be managed by an administrator and understand the implications.

Use Case ID:	UC 13C
Use Case Name:	Set User Permissions
Created By:	Kai Butalid
Date Created:	9/11/24
Description:	This use case describes the process by which the Administrator deletes user accounts within the system.
Primary Actor:	Administrator
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The Administrator is logged into the system with the necessary privileges to manage user accounts. • Users (Therapist, Patient, Assistant, Guardian) are registered in the system. • The Administrator is in the “Manage User Account” page.
Postconditions:	**Success:** The permissions of the user accounts are successfully set. **Failure:** • The permissions were not updated due to a system error or invalid input. • No changes are made to the user accounts list.
Trigger:	• The administrator needs to set permissions to adjust user permissions.
Main Flow:	2.4.8 System displays a list of all users (Therapist, Patient, Assistant, Guardian). 2.4.9 Administrator selects a user and chooses the "Set Permissions" option. .4.10 System displays the current permissions for the user and options to adjust them. .4.11 Administrator selects the appropriate permissions for the user based on their role. .4.12 Administrator submits the new permissions. .4.13 System validates the permissions for any conflicts or inconsistencies. .4.14 System updates the user’s permissions in the database. .4.15 System confirms the update and notifies the administrator.
Alternate Flow:	**6a. Permission Conflict:** 1. If the new permissions conflict with system rules or roles, the system notifies the administrator. 2. Administrator is prompted to resolve the conflict by adjusting the permissions.

Special Requirements	• The system must ensure that user data is handled securely during account management.
Assumptions	• The Administrator has the necessary privileges to manage all aspects of user accounts. • The administrator understands the roles, permissions, and data management policies within the system. • Users are aware that their accounts may be managed by an administrator and understand the implications.

Use Case ID:	UC 14
Use Case Name:	Monitor Site Traffic
Created By:	Kai Butalid
Date Created:	8/26/24
Description:	This use case describes the process by which an Administrator monitors and analyzes site traffic data, including user visits, activity, and engagement metrics within the system.
Primary Actor:	Administrator
Secondary Actor:	None
Include use cases:	None
Preconditions:	• The administrator is logged into the portal system with appropriate administrative privileges. • The system is online and accessible. • The system tracks and logs site traffic data, including user visits and interactions.
Postconditions:	**Success:** The administrator successfully views and analyzes site traffic data, including user activity and engagement metrics. **Failure:** The administrator is notified of any issues with accessing or displaying traffic data and is prompted to resolve the issue.
Trigger:	• The administrator wants to review and analyze site traffic to understand user engagement and system usage patterns.

Main Flow:	1. Administrator navigates to the "Analytics" section.
	2. Administrator selects the "Monitor Site Traffic" option.
	3. System displays options to view traffic data, including:
	  ○ Date range selection
	  ○ Traffic metrics (e.g., page views, unique visitors, session duration)
	  ○ User activity details (e.g., login frequency, session times)
	4. Administrator selects the desired date range and metrics to view.
	5. System retrieves and displays the site traffic data according to the selected parameters.
	6. Administrator analyzes the traffic data.
	7. Administrator generates reports based on the traffic data if needed.

Alternate Flow:	**4a. No Data Available:**

	1. If there is no traffic data available for the selected date range, the system notifies the administrator. 2. Administrator is prompted to adjust the date range or check data collection settings.
Special Requirements	• The system must ensure the accuracy and timeliness of traffic data.
Assumptions	• The administrator is familiar with interpreting site traffic metrics and reports. • The system is properly configured to track and log all relevant site traffic data.

2.4 Test Cases for Fully Dressed Use Cases

2.4.1 User Registration

1. **Test Case ID:** TCUR001
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** User Registration Main flow the user registers their email to the portal
    - **Prerequisites:**
        - The user does not have an existing account.
        - The system is online.
        - The user has access to a valid email address and internet.
    - **Test Data Requirement:**
        - Email address: test@example.com
        - Password: StrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to registration page	The registration page loads successfully.
2	Enter name, email, password, and role.	The user correctly enters the details required for registration.
3	User submits register form	System validates the data and creates the account.
4	Activate email	The system activates the account and notifies the user of successful registration.

2. **Test Case ID:** TCUR002
    - **Created by:** Villeza
    - **Priority:** Medium
    - **Description:** User Registration alternate flow = Duplicate Email
    - **Prerequisites:**
        - The user has attempted to register with an email that is already registered in the system.
        - The system is online and accessible.
        - An existing user account with the email test@example.com already exists in the system.
    - **Test Data Requirement:**
        - Registered Email address: test@example.com
        - Password: StrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to registration page	The registration page loads successfully.
2	Enter name, email, password, and role.	The user enters details, including a duplicate email address (already registered).
3	User submits register form	The system detects the duplicate email and displays an error message (e.g., "Email already registered. Please log in or use another email.").
4	Try to register again wikth the same email	The system continues to block the registration with the duplicate email until a different email is entered.

3. **Test Case ID:** TCUR003
    - **Created by:** Villeza
    - **Priority:** Medium

- **Description:** User Registration alternate flow = Email not received
- **Prerequisites:**
  - The user has successfully registered in the system, but the confirmation email is not received.
  - The system is online and accessible.
  - The email server is temporarily down or blocked, preventing email delivery.
- **Test Data Requirement:**
  - Email address: test@example.com
  - Password: StrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to registration page	The registration page loads successfully.
2	Enter name, email, password, and role.	The user successfully fills in the registration details.
3	User submits register form	The system registers the user but does not send the confirmation email due to a failure in the email server.
4	The user clicks the "Resend Email" button.	The system attempts to resend the confirmation email.
5	The user checks their email again.	The confirmation email is received successfully after resending.

2.4.2 User Login

1. **Test Case ID:** TCUL001
   - **Created by:** Villeza
   - **Priority:** High
   - **Description:** User Login Main flow
   - **Prerequisites:**
     - The user is registered in the system with an active account.
     - The system is online and accessible.
   - **Test Data Requirement:**

- Email address: test@example.com
- Password: StrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to the login page.	The login page loads successfully
2	Enter the registered email and password.	The user enters valid credentials for the registered account.
3	Submit the login form.	The system validates the credentials and authenticates the user.
4	The user is redirected to their dashboard.	The system redirects the user to the appropriate dashboard based on their role.

2. **Test Case ID:** TCUL002
   - **Created by:** Villeza
   - **Priority:** High
   - **Description:** User Login alternate flow = invalid credentials
   - **Prerequisites:**
     - The user is registered in the system but enters incorrect credentials (wrong email or password).
     - The system is online and accessible.
   - **Test Data Requirement:**
     - Email address: test@example.com
     - Wrong Password: WrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to the login page.	The login page loads successfully
2	Enter the registered email and an incorrect password.	The user enters valid email but an incorrect password.

3	Submit the login form.	The system detects the incorrect credentials and displays an error message (e.g., "Invalid email or password").
4	User remains on the login page.	The system prevents access to the dashboard and prompts the user to try again or reset their password.

3. **Test Case ID:** TCUL003
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** User Login alternate flow = Forgot Password
    - **Prerequisites:**
        - The user is registered in the system but enters incorrect credentials (wrong email or password).
        - The system is online and accessible.
    - **Test Data Requirement:**
        - Email address: test@example.com
        - New Password: NewStrongPassword123!

Step #	Step Details	Expected Results
1	Navigate to the login page.	The login page loads successfully
2	Click the "Forgot Password" link.	The system displays the "Forgot Password" form asking for the user's registered email.
3	Enter the registered email address and submit the form.	The system sends a password reset link to the user's registered email address.

4	User clicks the reset link in the email.	The system redirects the user to the password reset page.
5	Enter a new password and confirm.	The system validates the new password and updates the user's account.
6	User successfully logs in with the new password.	The system authenticates the user with the updated password and grants access to their dashboard.

2.4.3 Book Appointment

1. **Test Case ID:** TCBA001
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Book Appointment Main Flow
    - **Prerequisites:**
        - The user is logged into the system or is accessing as a visitor if login is not required for booking.
        - The system has available appointment slots for booking.
        - The system is online and accessible.
    - **Test Data Requirement:**
        - Appointment Date and Time: September 5, 2024, 10:00 AM
        - Email address: test@example.com
        - Phone number: 123-456-7890

Step #	Step Details	Expected Results
1	Navigate to the appointment booking page.	The appointment booking page loads successfully.
2	Select a therapist and view available time slots.	The system displays the therapist's available appointment slots.
3	Choose a time slot and enter contact details.	The user successfully selects a time

		slot and enters required contact information.
4	Confirm the appointment booking.	The system schedules the appointment, updates the therapist's schedule, and sends confirmation notifications to the user and the therapist.

2. **Test Case ID:** TCBA002
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Book Appointment Alternate Flow = Incomplete Contact Information
    - **Prerequisites:**
        - The user is logged into the system or is accessing as a visitor if login is not required for booking.
        - The system has available appointment slots for booking.
        - The system is online and accessible.
    - **Test Data Requirement:**
        - Appointment Date and Time: September 10, 2024, 11:00 AM
        - Email address: test@example.com

Step #	Step Details	Expected Results
1	Navigate to the appointment booking page.	The appointment booking page loads successfully.
2	Select a therapist and view available time slots.	The system displays the therapist's available appointment slots.
3	Choose a time slot and enter contact details, omitting the phone number.	The user attempts to submit the form with incomplete contact information.

4	Submit the appointment booking form.	The system detects the missing contact information and displays an error message (e.g., "Please provide all required contact details").
5	User corrects the information and resubmits.	The user adds the missing information and successfully books the appointment.

3. **Test Case ID:** TCBA003
    - **Created by:** Villeza
    - **Priority:** Medium
    - **Description:** Book Appointment Alternate Flow = System Error
    - **Prerequisites:**
        - The user is logged into the system or is accessing as a visitor if login is not required for booking.
        - The system has available appointment slots for booking.
        - The system is online but experiences an error during the appointment booking process.
    - **Test Data Requirement:**
        - Appointment Date and Time: September 5, 2024, 10:00 AM
        - Email address: test@example.com
        - Phone number: 123-456-7890

Step #	Step Details	Expected Results
1	Navigate to the appointment booking page.	The appointment booking page loads successfully.
2	Select a therapist and view available time slots.	The system displays the therapist's available appointment slots.
3	Choose a time slot and enter contact details, omitting the phone number.	The user successfully selects a time slot and enters

		required contact information.
4	Confirm the appointment booking.	The system encounters a technical error while attempting to save the appointment and displays an error message (e.g., "An error occurred while booking the appointment. Please try again later.").
5	Retry the booking process after system recovery.	The system successfully processes the booking after retrying and sends confirmation notifications to the user and therapist.

2.4.4 Appointment Management

1. **Test Case ID:** TCAM001
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Confirm the appointment.
    - **Prerequisites:**
        - The user has an active account and is logged into the system.
        - The system has available time slots for appointments.
        - The therapist's schedule is available in the system.
    - **Test Data Requirement:**
        - Email address: test@example.com
        - Phone number: 123-456-7890
        - Appointment Date and Time: September 07, 2024, 10:00 AM
        - Test User

Step #	Step Details	Expected Results
1	navigate to the appointment booking page.	The appointment booking page

		loads successfully.
2	Select a therapist and view available time slots.	The system displays the therapist's available time slots.
3	Choose a time slot and enter contact details.	The user successfully selects a time slot and enters contact details.
4	Confirm the appointment.	The system schedules the appointment, updates the therapist's schedule, and sends confirmation notifications to both the user and the therapist.

2. **Test Case ID:** TCAM002
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Appointment Management Alternate flow = Reschedule Appointment
    - **Prerequisites:**
        - The user has an existing appointment in the system.
        - The system is online and accessible.
        - The therapist's schedule has available time slots for rescheduling.
    - **Test Data Requirement:**
        - Existing Appointment: September 5, 2024, 10:00 AM
        - New Time Slot: September 07, 2024, 10:00AM

Step #	Step Details	Expected Results
1	Log into the system and navigate to the "Manage Appointments" page.	The page loads successfully, displaying existing appointments.

2	Select the existing appointment to be rescheduled.	The system displays the appointment details, along with available time slots for rescheduling.
3	Choose a new time slot for the appointment.	The user successfully selects a new time slot from the available options.
4	Confirm the rescheduled appointment.	The system updates the appointment with the new time, notifies the user and the therapist, and adjusts the therapist's schedule.

3. **Test Case ID:** TCAM003
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Appointment Management Alternate flow = Cancel Appointment
    - **Prerequisites:**
        - The user has an existing appointment in the system.
        - The system is online and accessible.
    - **Test Data Requirement:**
        - Appointment to Cancel: September 5, 2024, 10:00 AM

Step #	Step Details	Expected Results
1	Log into the system and navigate to the "Manage Appointments" page.	The page loads successfully, displaying existing appointments.
2	Select the appointment to be canceled.	The system displays the details of the appointment to be canceled.

3	Confirm the cancellation of the appointment.	The system removes the appointment, updates the therapist's schedule, and sends cancellation notifications to both the user and the therapist.
4	Verify that the appointment is removed from the list.	The appointment no longer appears in the user's list of scheduled appointments.

2.4.5 Recurring Appointments

1. **Test Case ID:** TCRA001
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** Recurring Appointments Scheduling - Main Flow
    - **Prerequisites:**
        - The patient has completed the initial appointment.
        - The therapist is logged into the system.
        - The system is online and the therapist’s schedule is accessible.
    - **Test Data Requirement:**
        - Appointment: Weekly, every Friday, 10:00 AM

Step #	Step Details	Expected Results
1	Navigate to the appointment booking page.	The appointment booking page loads successfully.
2	Select a therapist and view available time slots.	The system displays the therapist's available appointment slots.
3	Choose a time slot and enter contact details, omitting the phone number.	The user successfully selects a time slot and enters required contact information.

4	Confirm the appointment booking.	The system encounters a technical error while attempting to save the appointment and displays an error message (e.g., "An error occurred while booking the appointment. Please try again later.").
5	Retry the booking process after system recovery.	The system successfully processes the booking after retrying and sends confirmation notifications to the user and therapist.

2.4.6 View Appointments

1. **Test Case ID:** TCVA001
    - **Created by:** Villeza
    - **Priority:** High
    - **Description:** View Appointments = Main flow
    - **Prerequisites:**
        - The user has scheduled appointments in the system.
        - The system is online and accessible.
    - **Test Data Requirement:**
        - Appointment to View: September 5, 2024, 10:00 AM

Step #	Step Details	Expected Results
1	Log into the system and navigate to the "View Appointments" section.	The page loads successfully, displaying a list of upcoming and past appointments.

2	Review the list of scheduled appointments.	The system displays appointment details, including date, time, therapist, and status (e.g., upcoming, completed, canceled).
3	Click on an individual appointment for more details.	The system shows further details about the selected appointment, such as the location and session type (virtual or in-person).

2. **Test Case ID:** TCVA001
    - **Created by:** Villeza
    - **Priority:** Medium
    - **Description:** View Appointments Alternate Flow = No Appointments Found
    - **Prerequisites:**
        - The user has no scheduled or past appointments in the system.
        - The system is online and accessible.
    - **Test Data Requirement:**
        - User: Test User (No appointments)

Step #	Step Details	Expected Results
1	Log into the system and navigate to the "View Appointments" page.	The page loads successfully but shows a message stating that no appointments are found.
2	Verify the system's response to no appointments found.	The system displays a message like "No appointments

		found" and provides an option to schedule a new appointment.

2.4.7 Access Game Library

1. **Test Case ID:** TCGL001
    - **Created by:** Supremo
    - **Priority:** High
    - **Description:** Test the "Access Game Library" functionality
    - **Prerequisites:**
        - Access to the Game Library.
    - **Test Data Requirement:**
        - Username: testuser
        - Password: testpassword
        - Game: Test Game
        - Platform: PC/Mobile

Step #	Step Details	Expected Results
1	Log in with valid credentials	Logged in successfully
2	Navigate to the "Game Library" section	Game Library section is displayed
3	View the list of games available in the library	List of games is displayed correctly
4	Use the search bar to search for "Test Game"	Search results are displayed based on the input
5	Select "Test Game" and click "Play"	The game successfully launches
6	Monitor the system's recording of player actions	Player actions are recorded correctly

2. **Test Case ID:** TCGL002
    - **Created by:** Supremo

- **Priority:** High
- **Description:** Test the "Access Game Library" functionality when user is experiencing internet issues.
- **Prerequisites:**
  - Access to the Game Library
  - Network issue during gameplay
- **Test Data Requirement:**
  - Game: Test Game
  - Platform: PC/Mobile

Step #	Step Details	Expected Results
1	Simulate a network failure during gameplay	System attempts to reconnect and notifies the player

2.4.8 Access Patient Records

1. **Test Case ID:** TC_MPR001
   - **Created by:** Olarte
   - **Priority:** High
   - **Description:** Tests the system's capabilities to give the Therapist access and permissions to manage patient records.
   - **Prerequisites:**
     - System is online
     - Access to any browser
     - Therapist is logged in
   - **Test Data Requirement:**
     - First Name: Jane
     - Last Name: Cruz
     - Birthday: 09/25/2016
     - Contact Number: 09563523116
     - City: Imus
     - Province: Cavite
     - Condition: Test2

Step #	Step Details	Expected Results
1	Therapist navigates to the list of patients	System displays list of patients
2	Therapist selects a specific patient to manage	System retrieves and displays their records

3	Therapist does his/her desired changes after viewing the patient records (if any).	System detects the changes made to the patient records
4	The system asks the therapist to confirm the changes that he/she made.	A prompt will appear asking the therapist to confirm the changes made (if any)
5	The changes will take effect or not depending on what the therapist selects on the prompt	The system saves any changes if confirmed and not if the therapist chooses otherwise

2. **Test Case ID:** TC_CPR001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** As part of managing records, this tests the "create" function, which allows new patient records to be made by the therapist.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - Therapist is logged in
    - **Test Data Requirement:**
        - First Name: Junjun
        - Last Name: Baldez
        - Birthday: 6/19/2015
        - Contact Number: 09338455029
        - City: General Trias
        - Province: Cavite
        - Condition: Test2

Step #	Step Details	Expected Results
1	Therapist navigates to the list of patients	System displays list of patients
2	Therapist clicks the "Create New Patient Record" button	System displays a record creation form

3	Therapist fills out the form	User input is displayed for checking
4	Therapist submits the form	System validates input
5	System will display a message confirming the submission	System creates the new record and informs the user

3. **Test Case ID:** TC_DPR001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** As part of managing records, this tests the "delete" function which allows the therapist to remove records or unwanted data from the patient records.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - Therapist is logged in
    - **Test Data Requirement:**
        - First Name: Jane
        - Last Name: Cruz
        - Birthday: 09/25/2016
        - Contact Number: 09563523116
        - City: Imus
        - Province: Cavite
        - Condition: Test2

Step #	Step Details	Expected Results
1	Therapist navigates to the list of patients	System displays list of patients
2	Therapist selects a specific patient	System retrieves and displays their records
3	Therapist clicks the "Delete Record" button	System displays a warning that the action cannot be undone and needs confirmation
4	Therapist confirms his/her action by clicking the corresponding button	The specific patient record is deleted from the system and informs the user about the change

4. **Test Case ID:** TC_EPR001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** As part of managing records, this tests the "edit" function which allows the therapist to modify data from the patient records.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - Therapist is logged in
    - **Test Data Requirement:**
        - First Name: Junjun
        - Last Name: Baldez
        - Birthday: 6/19/2015
        - Contact Number: 09338455029
        - City: General Trias
        - Province: Cavite
        - Condition: Test2

Step #	Step Details	Expected Results
1	Therapist navigates to the list of patients	System displays list of patients
2	Therapist selects a specific patient	System retrives and displays their records
3	Therapist does his/her desired changes to the record.	System displays user input for checking
4	Therapist clicks the "Save changes" button	System displays a prompt requesting the confirmation of the therapist
5	Therapist confirms the changes made by clicking the corresponding button	System commits the changes to the record and informs the user

2.4.9 Access Patient Progress Notes

1. **Test Case ID:** TC_APN001
    - **Created by:** Olarte
    - **Priority:** High

- **Description:** Tests the system's capability to allow the therapist to have access to all the patients' progress notes
- **Prerequisites:**
  - System is online
  - Access to any browser
  - Therapist is logged in
- **Test Data Requirement:**
  - Note Title: Jane Cruz Note
  - Session Date: Oct. 12, 2024
  - Note Content: Note content test!

Step #	Step Details	Expected Results
1	Therapist navigates to list of patients	List of patients is displayed
2	Therapist selects specific patient to check their notes	System retrieves and displays their progress notes
3	Therapist does his/her desired changes after viewing the progress notes(if any)	System detects the changes made to the progress notes
4	The system asks the therapist to confirm the changes that he/she made.	A prompt will appear asking the therapist to confirm the changes made (if any)
5	The changes will take effect or not depending on what the therapist selects on the prompt	The system saves any changes if confirmed and not if the therapist chooses otherwise

2. **Test Case ID:** TC_CPN001
   - **Created by:** Olarte
   - **Priority:** High
   - **Description:** As part of managing progress notes, tests the capability of the therapist to create progress notes.
   - **Prerequisites:**
     - System is online

    - Access to any browser
    - Therapist is logged in
- **Test Data Requirement:**
    - Session Date: Oct. 18, 2024
    - Note title: John Doe Note
    - Note content: Note Content 1234@

Step #	Step Details	Expected Results
1	Therapist navigates to list of patients	List of patients is displayed
2	Therapist selects a specific patient	System retrieves and displays their progress notes
3	Therapist creates a new note, filling up important details such as the session date.	User input is displayed
4	Therapist saves the note by confirming the content	System validates the input
5	System displays a message informing the user about the event	The newly created note is saved to the system

3. **Test Case ID:** TC_DPN001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** As part of managing progress notes, tests the capability of the therapist to delete progress notes.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - Therapist is logged in
    - **Test Data Requirement:**
        - Session Date: Oct. 18, 2024
        - Note title: John Doe Note
        - Note content: Note Content 1234@

Step #	Step Details	Expected Results

1	Therapist navigates to list of patients	List of patients is displayed
2	Therapist selects a specific patient	System retrieves and displays their progress notes
3	Therapist clicks the "Delete Note" button	System displays a warning that the action cannot be undone and needs confirmation
4	Therapist confirms his/her action by clicking the corresponding button	The specific progress note is deleted from the system and it informs the user about the change

4. **Test Case ID:** TC_EPN001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** As part of managing progress notes, tests the capability of the therapist to edit existing progress notes.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - Therapist is logged in
    - **Test Data Requirement:**
        - Session Date: Oct. 18, 2024
        - Note title: John Doe Note
        - Note content: Note Content 1234@

Step #	Step Details	Expected Results
1	Therapist navigates to list of patients	List of patients is displayed
2	Therapist selects a specific patient	System retrieves and displays their progress notes
3	Therapist clicks the "Edit Note" button	System allows the editing of the specific progress note
4	Therapist does his/her desired changes to the progress note.	System displays user input for checking

5	Therapist confirms his/her action by clicking the corresponding button	The changes made to the specific progress note is reflected to the system

2.4.10 View Progress Notes

1. **Test Case ID:** TC_VPN001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** Tests the system's capabilities to give different permissions to different roles in viewing progress notes.
    - **Prerequisites:**
        - Access to any browser
        - User is logged in
    - **Test Data Requirement:**
        - Session Date: Oct. 18, 2024
        - Note title: John Doe Note
        - Note content: Note Content 1234@

Step #	Step Details	Expected Results
1	Member navigates to his/her profile	Customer is transported to their respective profile page
2	Member clicks the notes section	The member's existing notes are partly displayed
3	Select specific note	All content of the note is displayed

2. **Test Case ID:** TC_VPN002
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** Tests the system's capabilities to give different permissions to different roles in viewing progress notes.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - User is logged in
    - **Test Data Requirement:**
        - Session Date: Oct. 18, 2024
        - Note title: John Doe Note

- Note content: Note Content 1234@

Step #	Step Details	Expected Results
1	Assistant navigates to the list of patients	List of patients is displayed
2	Assistant selects a specific patient to view their notes	Notes per session of specific patient are displayed
3	Assistant selects a specific note	All contents of the specific note is displayed

3. **Test Case ID:** TC_VPN003
   - **Created by:** Olarte
   - **Priority:** High
   - **Description:** Tests the response of the system in the event that it retrieves no information about a patient's progress notes due to lack of content.
   - **Prerequisites:**
     - System is online
     - Access to any browser
     - User is logged in

Step #	Step Details	Expected Results
1	Navigate to list of patients	List of patients is displayed
2	Select specific patient	Notes per session of specific patient is displayed
3	System alerts user that there are no notes available for the specific patient	A message appears to the user informing them that the specific patient doesn't have notes.
4	The user can choose whether to go back to the menu or create a progress note for the patient	The patient will be transported to the menu or the progress note creation page, depending on the option selected

2.4.11 Report Issue

1. **Test Case ID:** TC_RI001
    - **Created by:** Olarte
    - **Priority:** High
    - **Description:** Tests the system's capability to handle filed reports about issues concerning the portal
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - User is logged in
    - **Test Data Requirement:**
        - Problem description: Lorem ipsum 1234@
        - Severity: 3/5
        - Date encountered: 08/29/24

Step #	Step Details	Expected Results
1	Navigate to the "Report Issue" button on the dashboard.	A form for issuing a report is displayed.
2	User fills out the form completely.	User's input is displayed for them to verify the report content.
3	User submits the form.	Content is submitted and validated by the system.
4	System displays a confirmation message about the report being submitted.	Report is saved to the system for further analysis.

2. **Test Case ID:** TC_RI002
    - **Created by:** Olarte
    - **Priority:** Medium
    - **Description:** Tests the capability of the system to detect an incomplete form and its response by informing the user about the issue.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - User is logged in
    - **Test Data Requirement:**
        - Problem description: Lorem ipsum 1234@

Step #	Step Details	Expected Results
1	Navigate to the "Report Issue" button on the dashboard	A form for issuing a report is displayed
2	User fills out the form incompletely	User input is displayed for them to verify the report content
3	User submits the form	Form content is saved to the system for further analysis
4	System finds and determines the incomplete fields	Incomplete fields are highlighted for the user to fill out before being able to submit successfully.

3. **Test Case ID:** TC_RI003
    - **Created by:** Olarte
    - **Priority:** Medium
    - **Description:** Tests the capability of the system to inform the user upon failing to save the submitted report to the system specifically due to system errors.
    - **Prerequisites:**
        - System is online
        - Access to any browser
        - User is logged in

Step #	Step Details	Expected Results
1	Navigate to the "Report Issue" button on the dashboard	A form for issuing a report is displayed
2	User fills out the form completely	User input is displayed for them to verify the report content
3	User submits the form.	System encounters an error while trying to save the created report
4	System displayes a warning that the report wasn't submitted	Report is saved to the system for further analysis.

	successfully and the given reason	

2.4.12 Update User Accounts

1. **Test Case ID:** TCMU001
    - **Created by:** Butalid
    - **Priority:** Low
    - **Description:** Verify that the administrator can navigate to the "User Management" section in the portal system.
    - **Prerequisites:**
        - Access to a web browser. (Chrome, Firefox, etc.)
        - Administrator is logged in.
    - **Test Data Requirement:**
        - Portal:
        - Username:
        - Password:

Step #	Step Details	Expected Results
1	Navigate to Portal	Portal system should open.
2	Log in with valid administrator credentials.	Administrator should be logged in and see the main dashboard.
3	Click on "User Management" section.	System should display the "User Management" section.

2. **Test Case ID:** TCMU002
    - **Created by:** Butalid
    - **Priority:** High
    - **Description:** Validate that an administrator can edit user account details.
    - **Prerequisites:**
        - Administrator is logged in.
        - Access to the "Manage User Account" section.
    - **Test Data Requirement:**
        - User: Therapist
        - Updated Information: Change contact number to 0912345678

Step #	Step Details	Expected Results
1	Select "Therapist" from the user list and click "Edit".	System displays editable fields for the user.
2	Update the contact number to 0912345678	The email field should accept the new input.
3	Submit the changes.	System should validate the information and update the user account.
4	Confirm update message is displayed.	Success message confirming the account update.

3. **Test Case ID:** TCMU003
    - **Created by:** Butalid
    - **Priority:** High
    - **Description:** Verify that an administrator can delete a user account.
    - **Prerequisites:**
        - Administrator is logged in.
        - Access to the "Manage User Account" section.
    - **Test Data Requirement:**
        - User: Patient

Step #	Step Details	Expected Results
1	Select a user (e.g., Patient) from the user list and click "Delete".	System prompts for confirmation of deletion.
2	Confirm the deletion.	System checks for dependencies related to the user.
3	System deletes the user account if no dependencies exist.	Success message confirming deletion and user

		account removed.

4. **Test Case ID:** TCMU004
    - **Created by:** Butalid
    - **Priority:** Medium
    - **Description:** Verify system behavior when invalid user information is entered during editing.
    - **Prerequisites:**
        - Administrator is logged in.
        - Access to the "Manage User Account" section.
    - **Test Data Requirement:**
        - User: Assisstant

Step #	Step Details	Expected Results
1	Select a user (e.g., Assistant) and click "Edit".	Editable fields for the user should be displayed.
2	Enter an invalid email format (e.g., "invalidemail").	System should display an error message: "Invalid email format."
3	Attempt to submit the changes.	System prevents submission and prompts for correction.

5. **Test Case ID:** TCMU005
    - **Created by:** Butalid
    - **Priority:** Medium
    - **Description:** Ensure the system handles permission conflicts appropriately.
    - **Prerequisites:**
        - Administrator is logged in.
        - Access to the "Manage User Account" section.
    - **Test Data Requirement:**
        - User: Assisstant

Step #	Step Details	Expected Results

1	Select a user (e.g., Assistant) and click "Set Permissions".	System displays current permissions and options to adjust them.
2	Assign conflicting permissions (e.g., view-only and edit for the same data).	System should display an error message: "Permission conflict detected."
3	Attempt to submit the conflictiong permissions.	System prevents submission and prompts for correction.

6. **Test Case ID:** TCSP001
    - **Created by:** Butalid
    - **Priority:** High
    - **Description:** Verify that the administrator can successfully adjust the user permissions based on the user's role.
    - **Prerequisites:**
        - Administrator is logged in.
        - Users (Therapist, Patient, Assistant, Parent/Guardian) are already registered.
    - **Test Data Requirement:**
        - Choose User: Zoraida Francisco
        - Permission Level: Edit

Step #	Step Details	Expected Results
1	Administrator selects the user therapist.	List of users is displayed as expected.
2	Administrator selects the "Set Permissions" option.	Current permissions are displayed.
3	Administrator selects and submits new permissions based on the user's role.	System updates the permissions accordingly.

4	System confirms that the new permissions were successfully updated.	Success message displayed.

7. **Test Case ID:** TCSP002
    - **Created by:** Butalid
    - **Priority:** High
    - **Description:** Ensure conflicts are resolved
    - **Prerequisites:**
        - Administrator is logged in.
        - Users (Therapist, Patient, Assistant, Parent/Guardian) are already registered.
    - **Test Data Requirement:**
        - User Type: Member
        - Permission Level: Edit

Step #	Step Details	Expected Results
1	Administrator selects the user member.	List of users is displayed as expected.
2	Administrator selects the "Set Permissions" option for a user.	Current permissions are displayed.
3	Administrator selects and submits the wrong permissions.	System notifies if a conflict is found.
4	Administrator corrects any conflicts.	The new permissions are saved.
5	System confirms that the new permissions were successfully updated.	Success message displayed.

2.4.13 Monitor Site Traffic

1. **Test Case ID:** TCMT001
    - **Created by:** Butalid
    - **Priority:** Low
    - **Description:** Verify that the administrator can navigate to the "Site Traffic" section in the portal system.
    - **Prerequisites:**
        - Access to a web browser. (Chrome, Firefox, etc.)
        - Administrator is logged in.
    - **Test Data Requirement:**
        - Portal:
        - Username:
        - Password:

Step #	Step Details	Expected Results
1	Navigate to Portal	Portal system should open.
2	Log in with valid administrator credentials.	Administrator should be logged in and see the main dashboard.
3	Click on "Site Traffic" section.	System should display the "Schedule Management" section.

2. **Test Case ID:** TCMT002
    - **Created by:** Butalid
    - **Priority:** High
    - **Description:** Verify that the administrator can view traffic data by selecting a date range and metrics.
    - **Prerequisites:**
        - Access to the "Monitor Site Traffic" section.
    - **Test Data Requirement:**
        - Date Range:
        - Metrics: Page views, unique visitors, session duration

Step #	Step Details	Expected Results

1	Select the date range.	System should allow date range selection without errors.
2	Select traffic metrics.	The metrics should be selectable and visible on the screen.
3	Click on "View Traffic".	System retrieves and displays the site traffic data as per selected parameters.

3. **Test Case ID:** TCMT003
    - **Created by:** Butalid
    - **Priority:** Medium
    - **Description:** Verify system behavior when no traffic data is available for the selected date range.
    - **Prerequisites:**
        - Access to the "Monitor Site Traffic" section.
        - Set a date range where no traffic data is recorded.
    - **Test Data Requirement:**
        - Date Range:

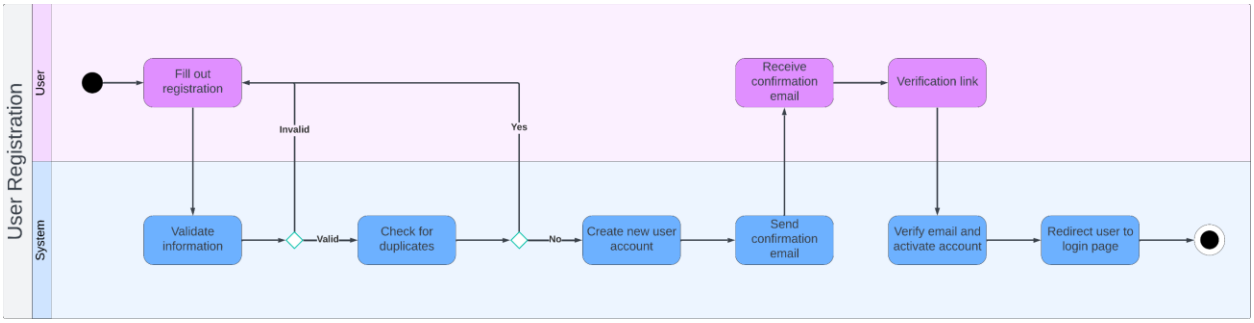
Step #	Step Details	Expected Results
1	Select the date range with no traffic data.	System checks for data availability and detects no data.
2	Click on "View Traffic".	System displays a message: "No traffic data available for the selected date range."
3	Prompt to adjust the date range or check data collection settings.	System should display options to adjust date range or settings.

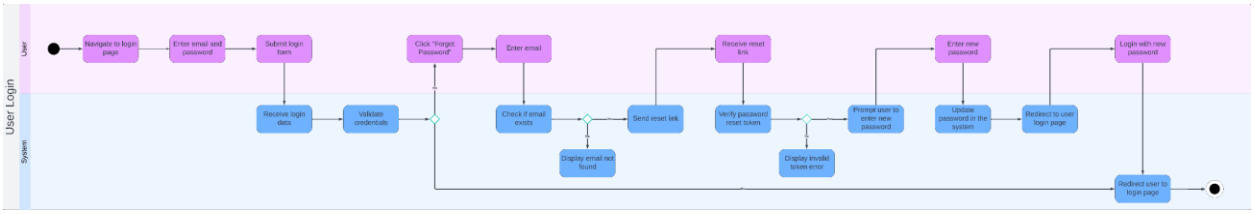
4. **Test Case ID:** TCMT004
    - **Created by:** Butalid
    - **Priority:** Medium
    - **Description:** Verify system behavior when data retrieval fails.
    - **Prerequisites:**
        - Access to the "Monitor Site Traffic" section.
        - Simulated scenario where data retrieval fails.

Step #	Step Details	Expected Results
1	Attempt to view traffic data during a simulated data retrieval failure.	System detects the issue and displays an error message: "Unable to retrieve traffic data due to a system error."
2	Provide options to retry.	System should display options to retry the action.

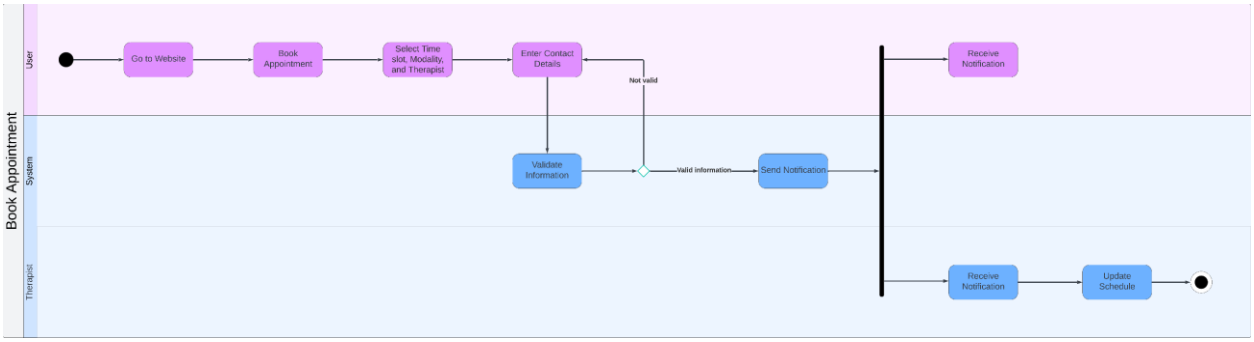
2.5 Activity Diagrams with Swimlane

2.5.1 Authenticate

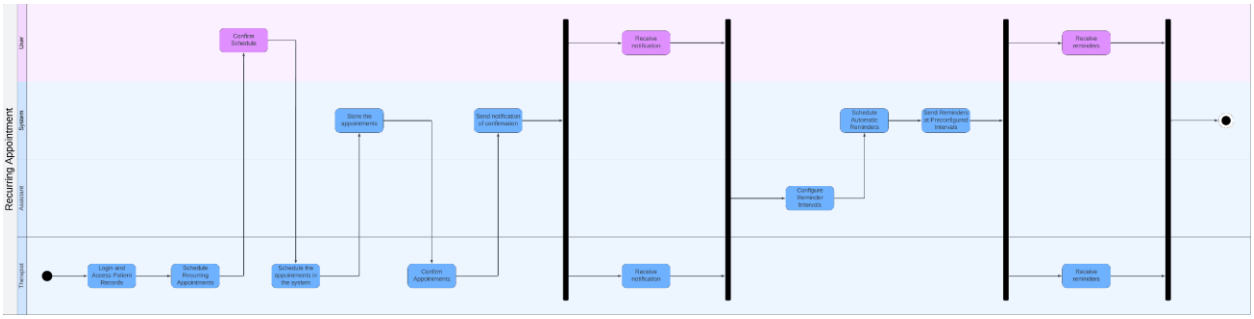




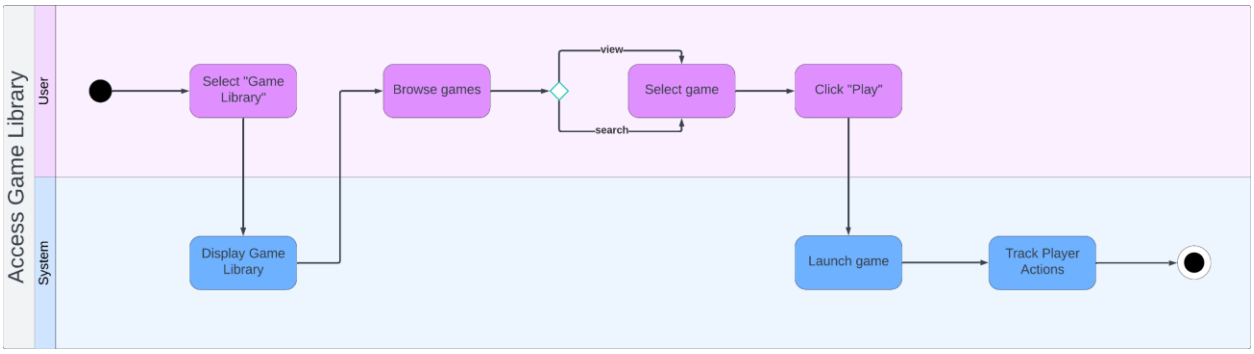
2.5.2 Book Appointment



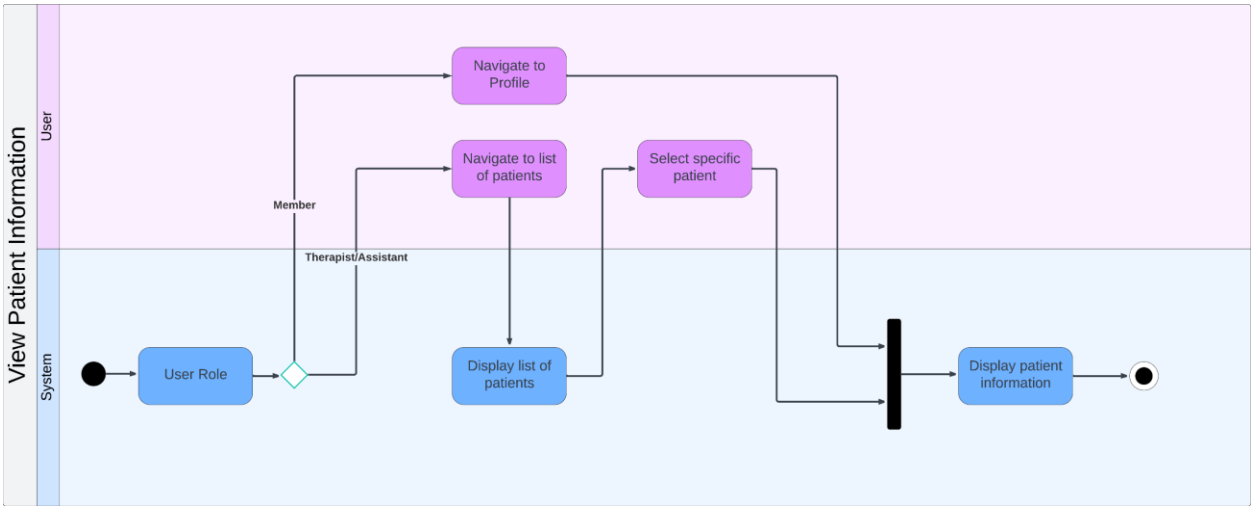
2.5.3 Recurring Appointment



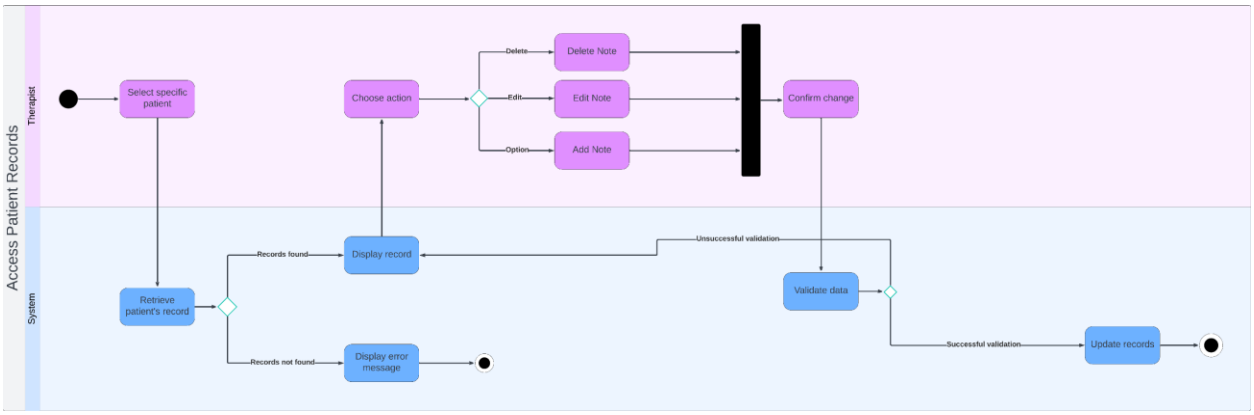
2.5.4 Access Game Library

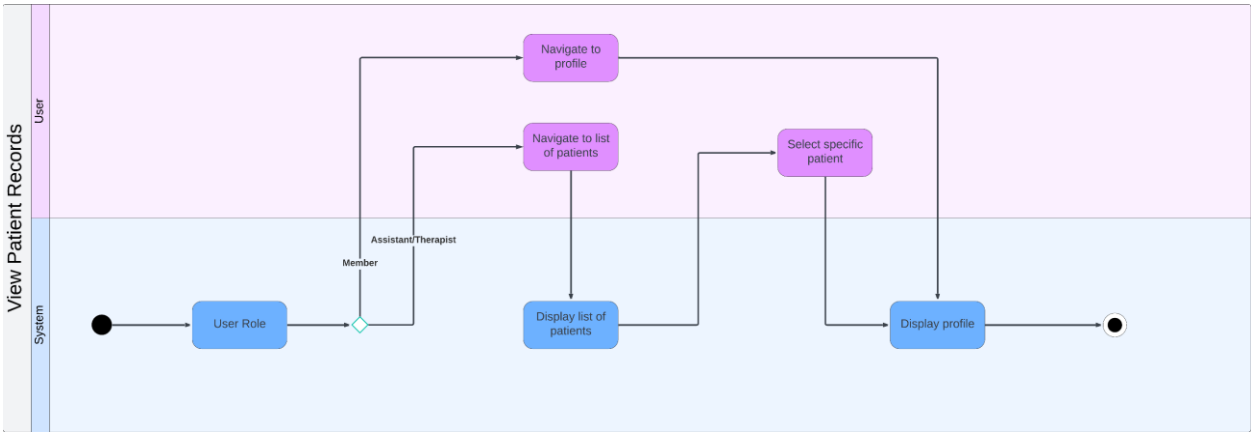


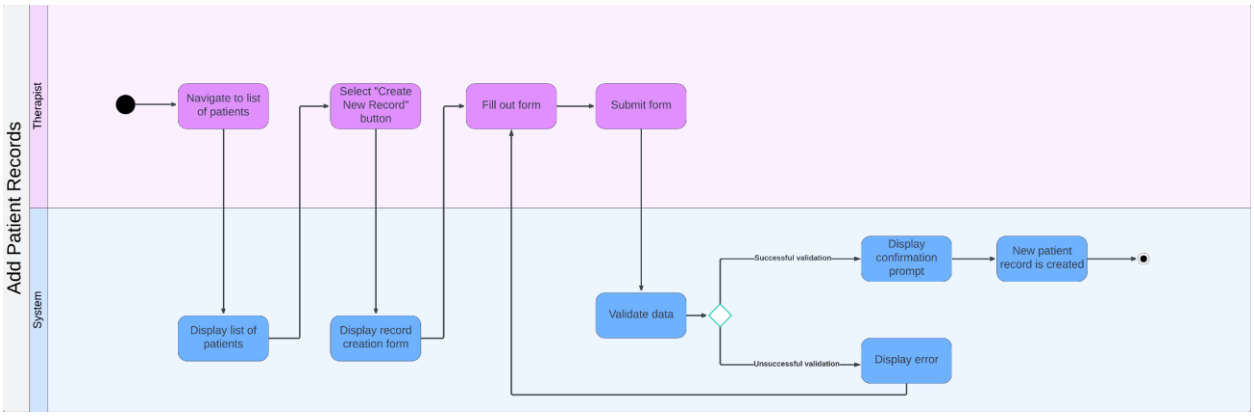
2.5.5 Patient Information

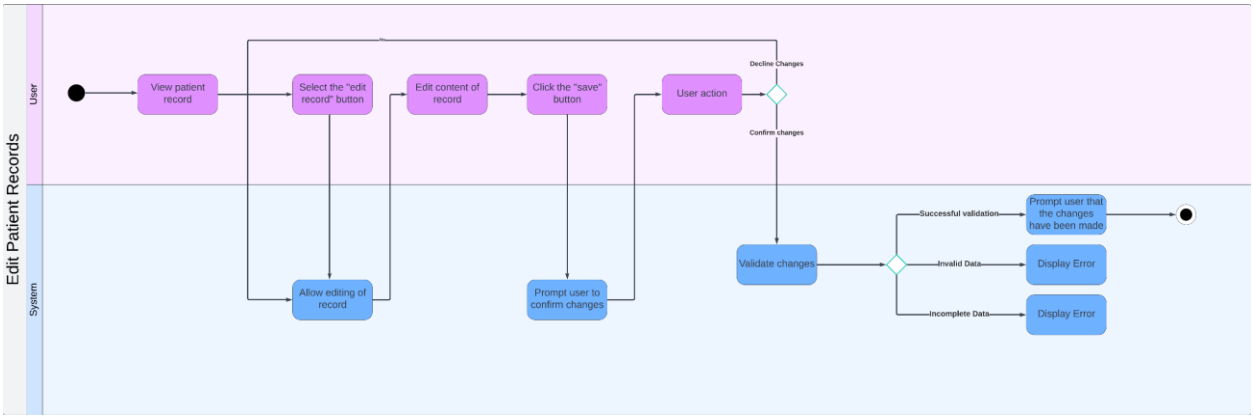


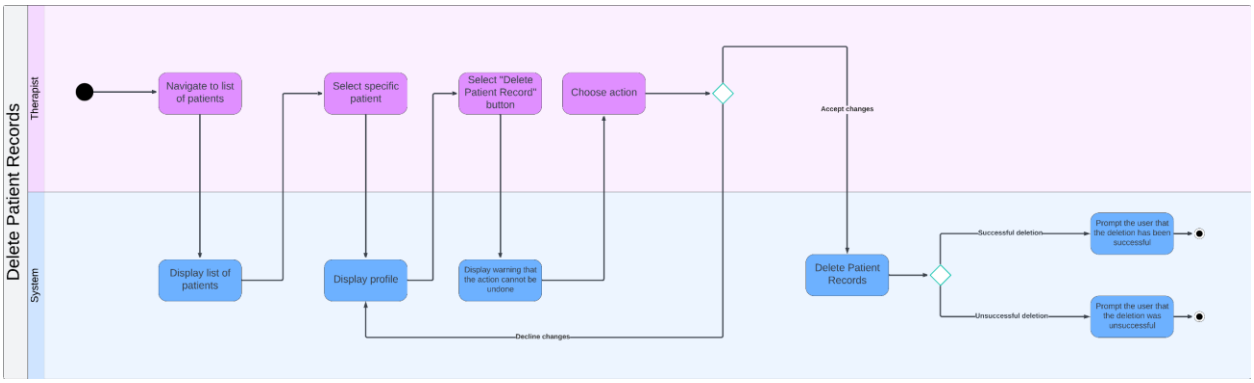
2.5.6 Patient Records



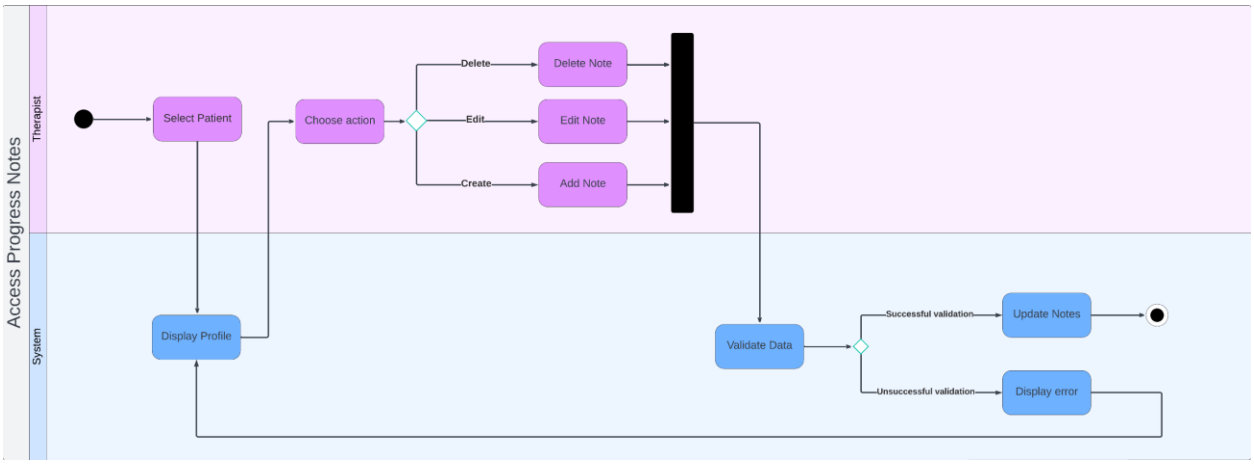

View Patient Records
User
System
Navigate to profile
Navigate to list of patients
Select specific patient
Assistant/Therapist
Member
User Role
Display list of patients
Display profile

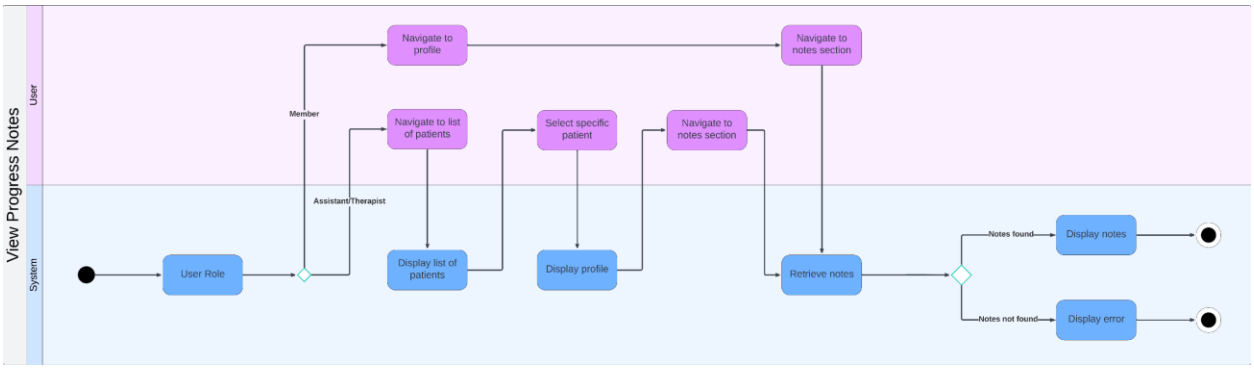

Add Patient Records
Therapist
System
Navigate to list of patients
Select "Create New Record" button
Fill out form
Submit form
Display list of patients
Display record creation form
Validate data
Successful validation
Display confirmation prompt
New patient record is created
Unsuccessful validation
Display error

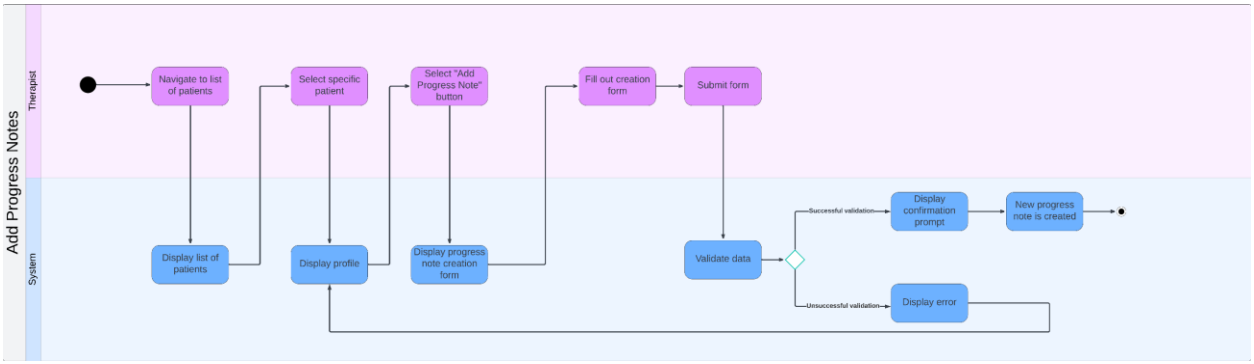


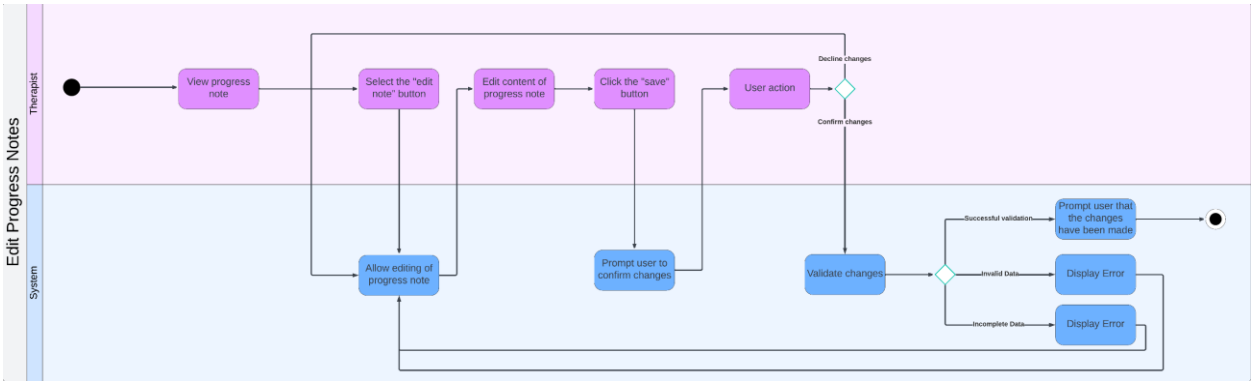


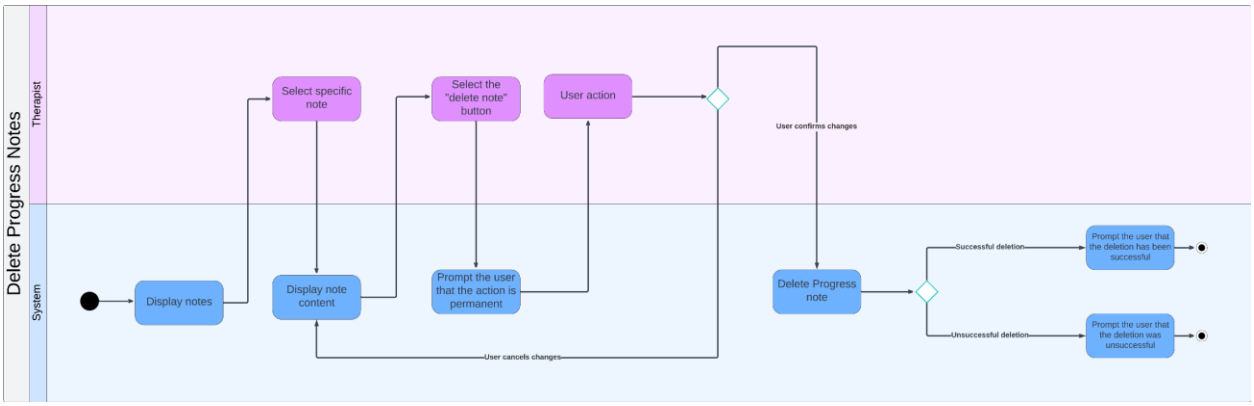
2.5.7 Progress Notes



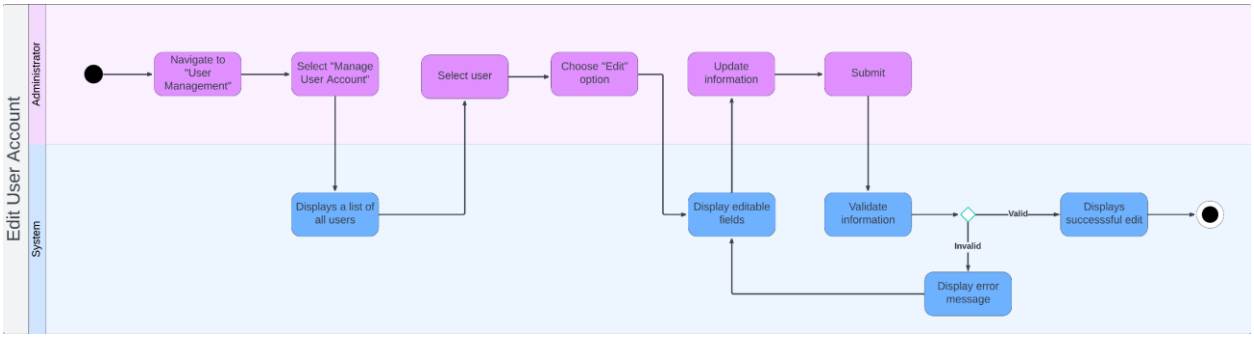


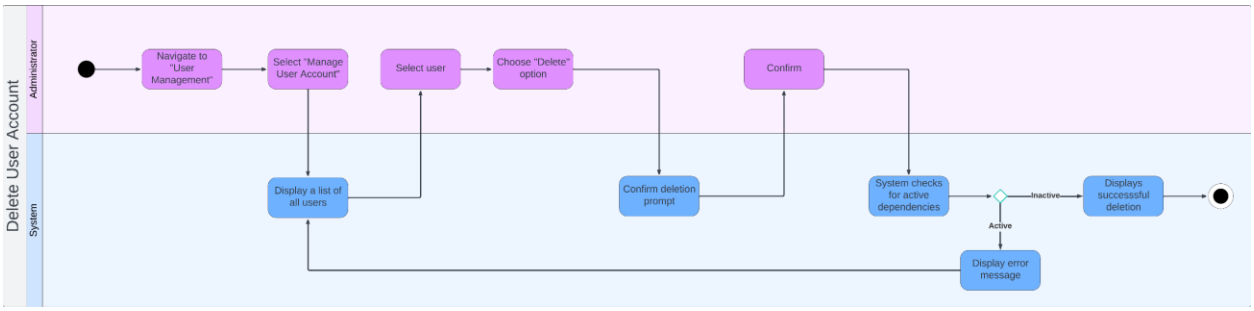




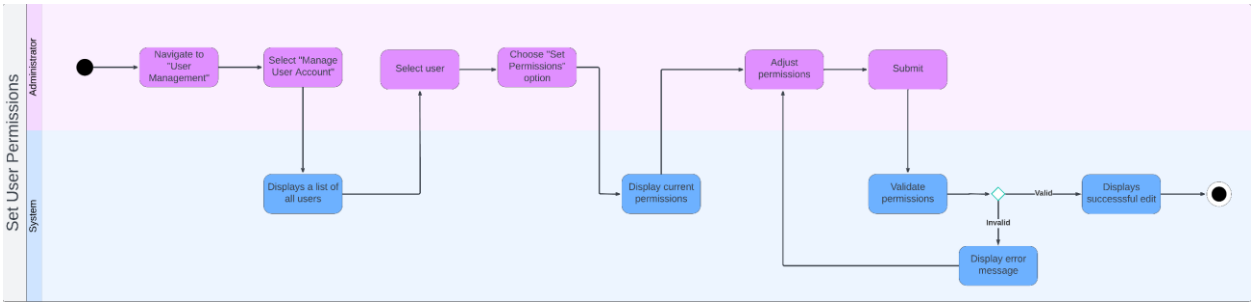


2.5.8 Update User Account

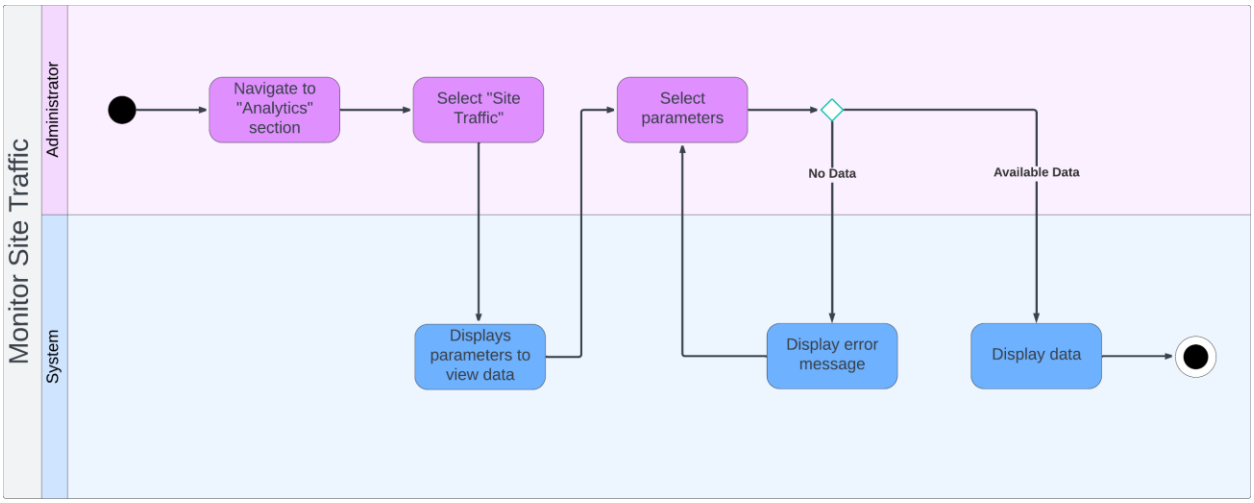




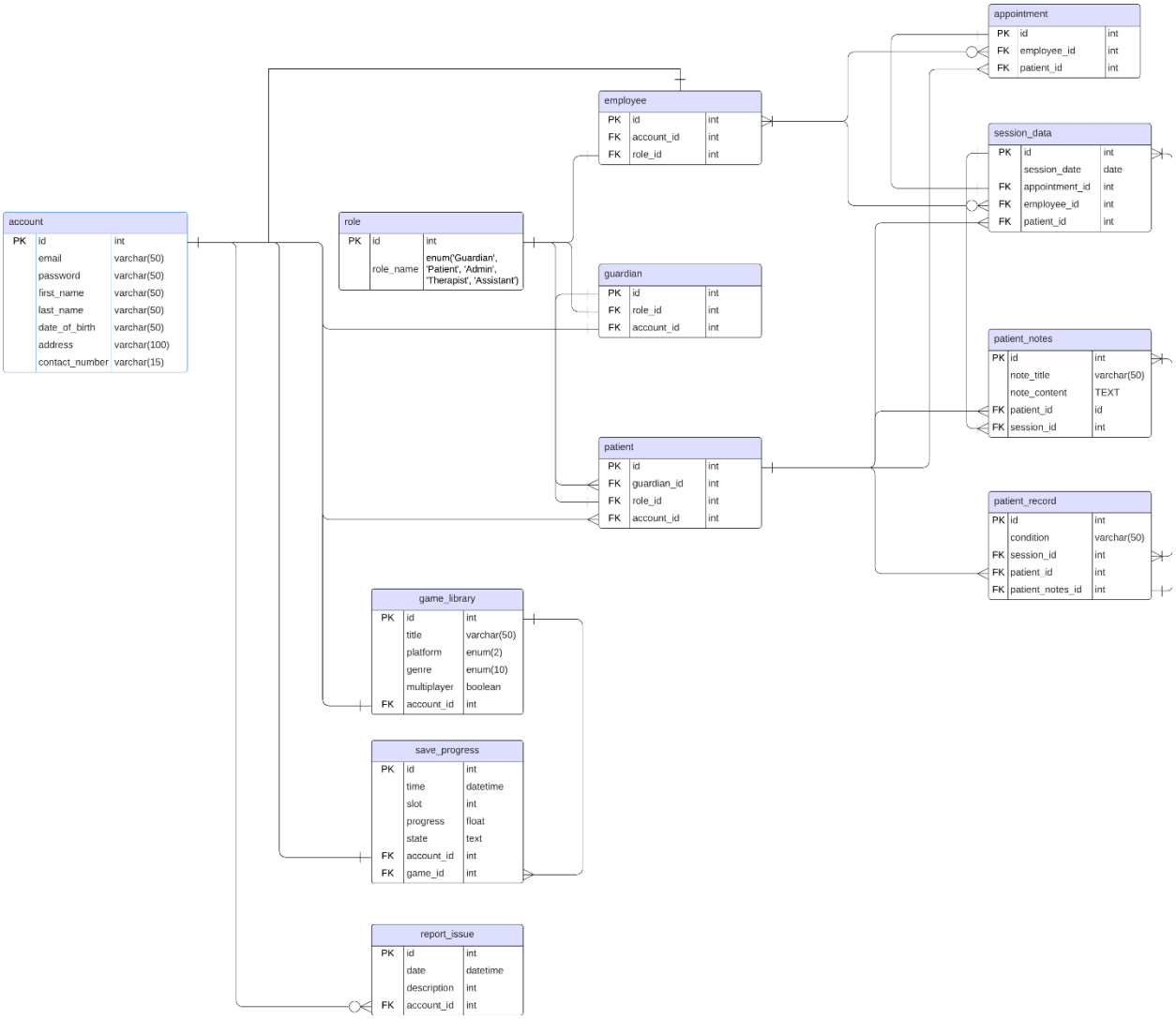
2.5.9 Set User Permissions



2.5.10 Monitor Site Traffic



2.6 Database Design



2.7 Product Backlog / User Stories

Table I

PRODUCT BACKLOG

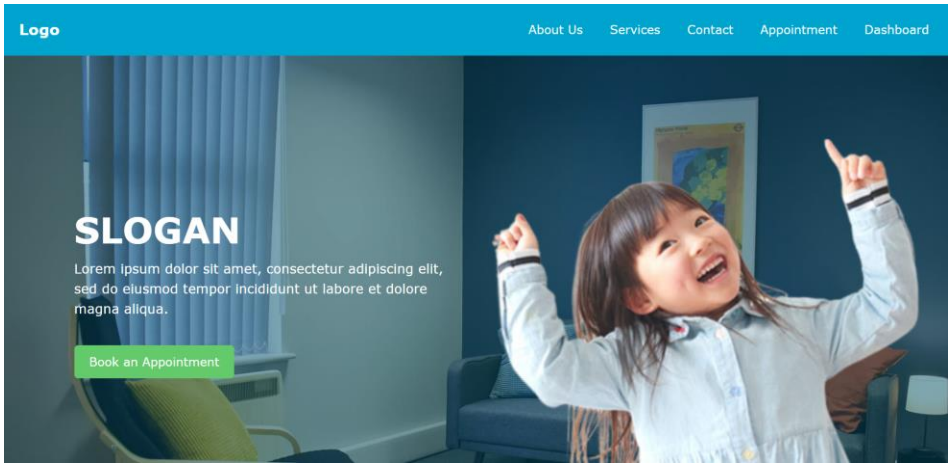
ID	As a…	I want to be able to…	So that…	Priority
1.	Visitor	View business information	I can be informed about specific details	Must
2.	Visitor	Create an account	I can benefit from member privileges	Must

3.	Member	Log-in	I can easily access the progress notes and my upcoming appointments	Must
4.	Visitor	Schedule initial appointment	I can easily book an appointment with the clinic	Must
5.	Member/Therapist	View my upcoming appointments with a calendar	I can be informed in advance of my next appointment	Must
6.	Member	View my/my family member's progress throughout the sessions	I gain some insight about what happens in the sessions	Must
7.	Member/Therapist	participate in AR therapy games	I can engage in interactive exercises	Must
8.	Member	Modify account details	The information included is not obsolete	Should
9.	Member	Receive SMS reminders	I don't miss a therapy session	Could
10.	Administrator	Manage all patient records	I can view and edit information when needed	Must
11.	Administrator	Manage schedules	I can make sure there are no conflicts and errors	Must
12.	Administrator	Manage user accounts	I can ensure system security and access control	Should
13.	Administrator	Set permissions	I can grant access based on user roles	Must

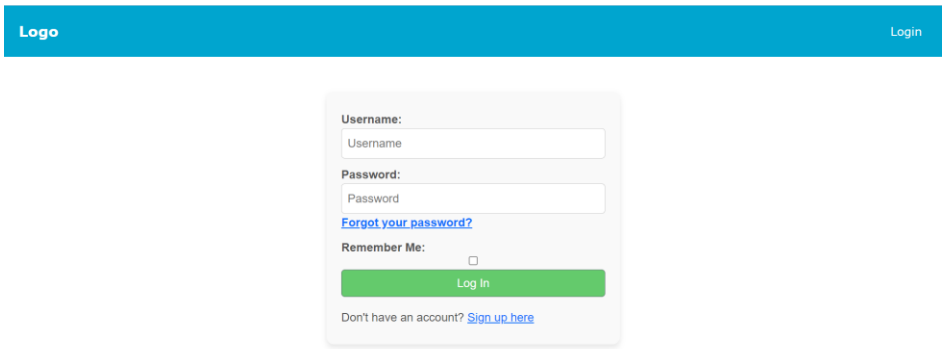
14.	Administrator	Make changes to the website	The site can have constant updates	Must
15.	Administrator	Monitor site traffic	I can make necessary improvements accordingly	Should
16.	Therapist	Add progress notes for the patients after every session	I can keep track of their progress throughout their treatment journey	Must
17.	Therapist	Manage appointments	I can schedule reoccurring appointments with my patients	Must
18.	Therapist	Add and view patient records	I can easily save and access patient information	Must
19.	Assistant	View the therapist's progress notes for patients	I can assist the therapist accordingly during the sessions	Should
20.	Member	Make a report when encountering an issue	I can help the system improve and fix bugs	Should
21.	Therapist	Make a report when encountering an issue	I can help the system improve and fix bugs	Should
22	Assistant	Make a report when encountering an issue	I can help the system improve and fix bugs	Should

2.8 Partially working Cloud Hosted Prototype

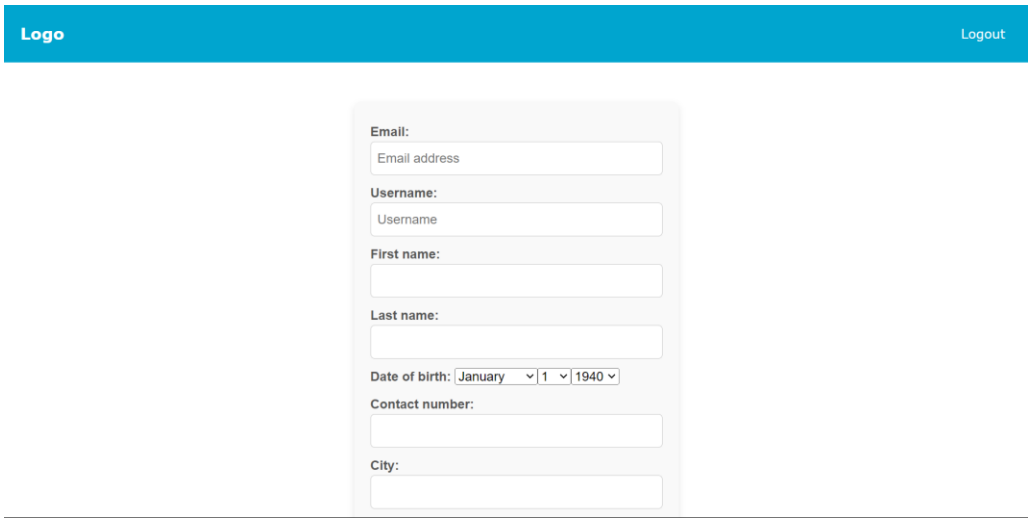
Home Page

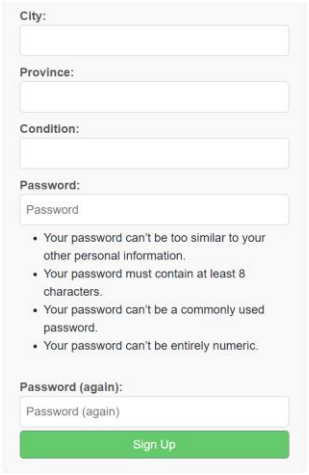


Login Page

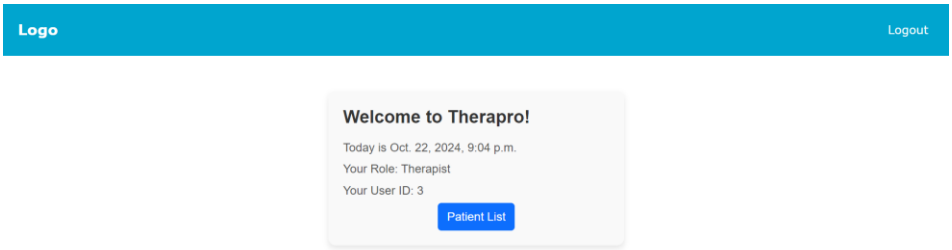


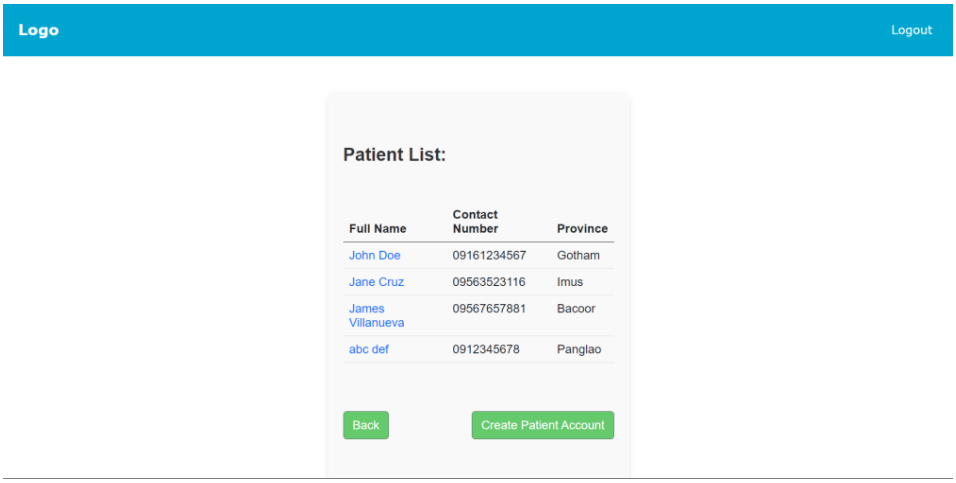
Sign-up Page

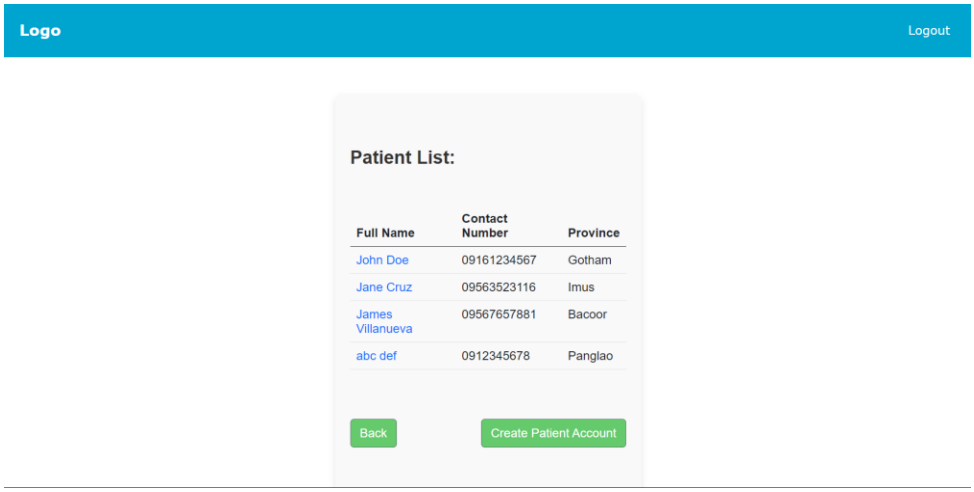




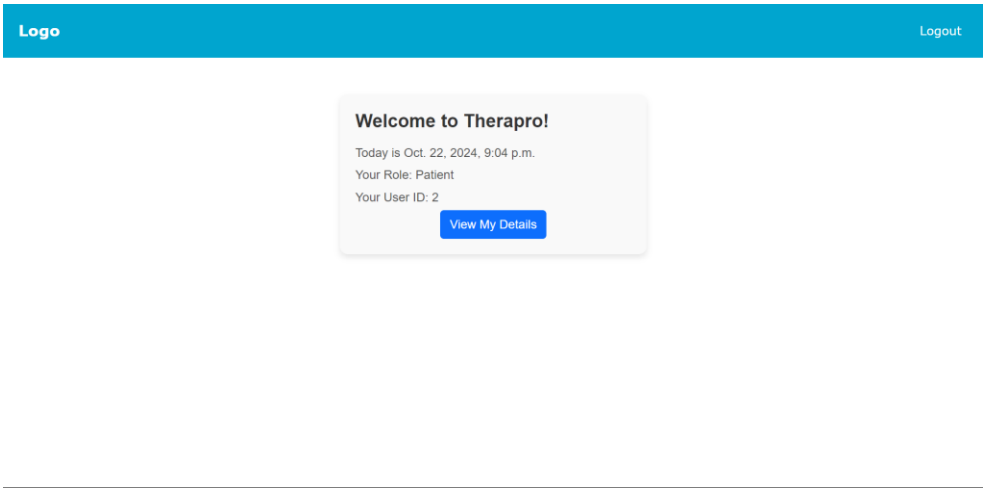
Role-based Access Control: Therapist

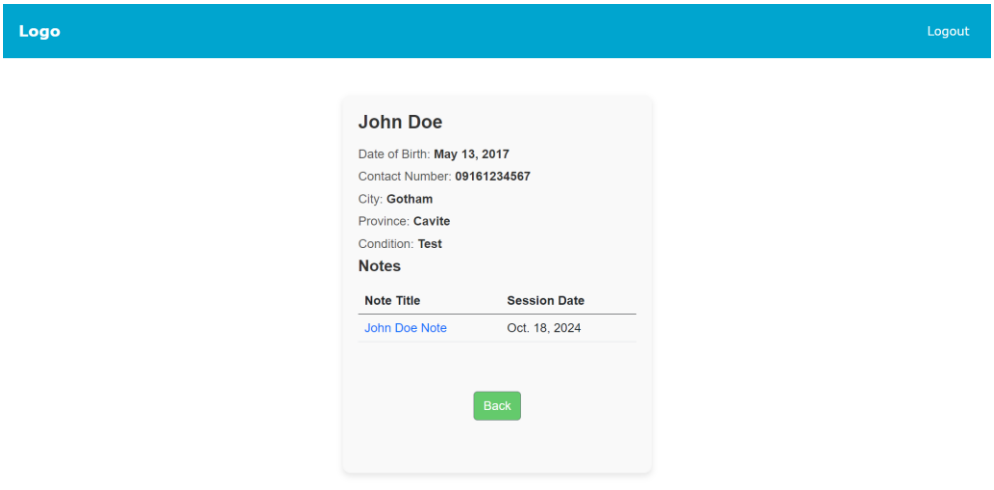




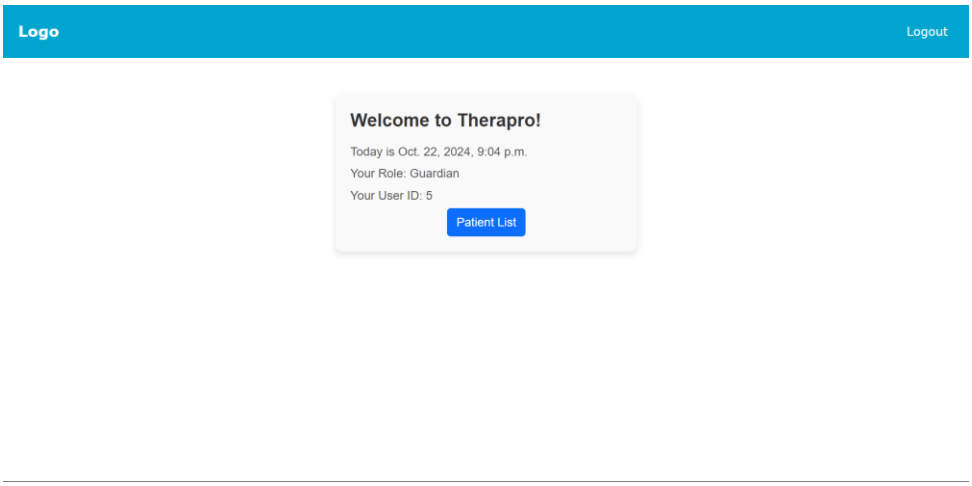


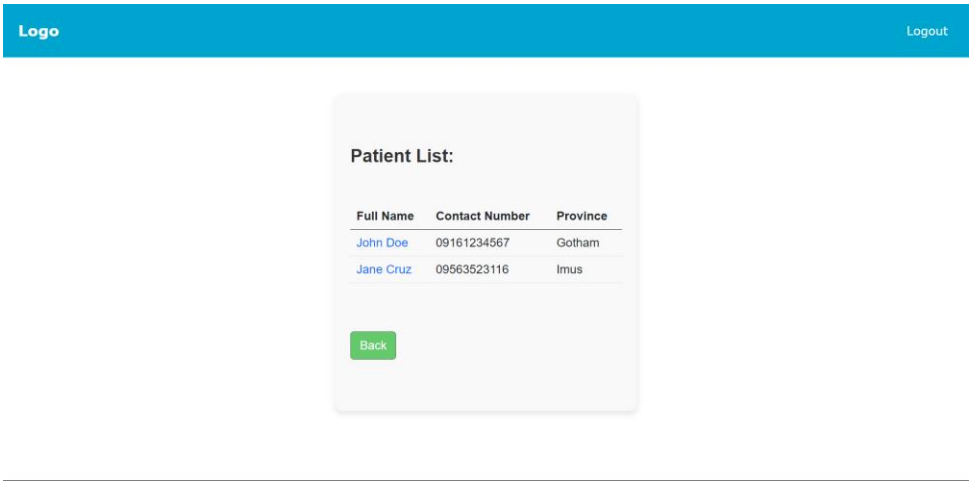
Role-based Access Control: Patient

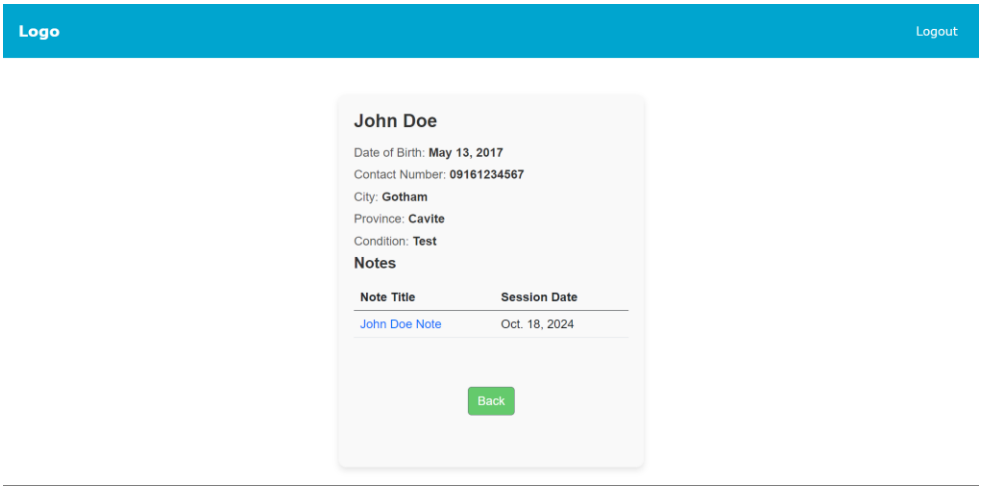




Role-based Access Control: Guardian

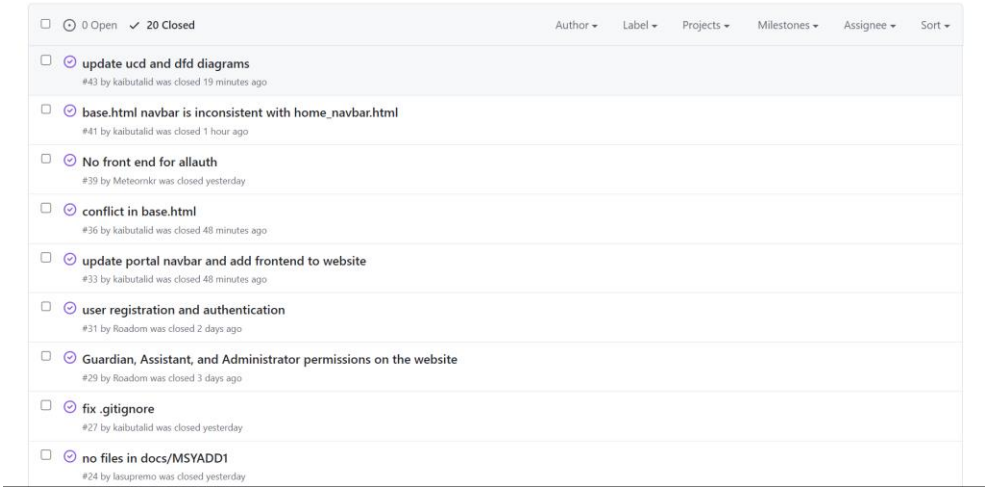


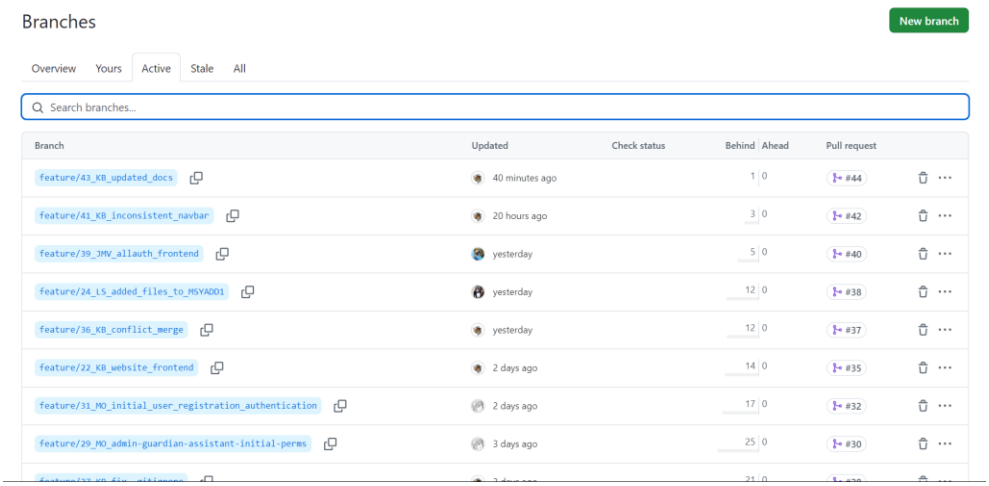




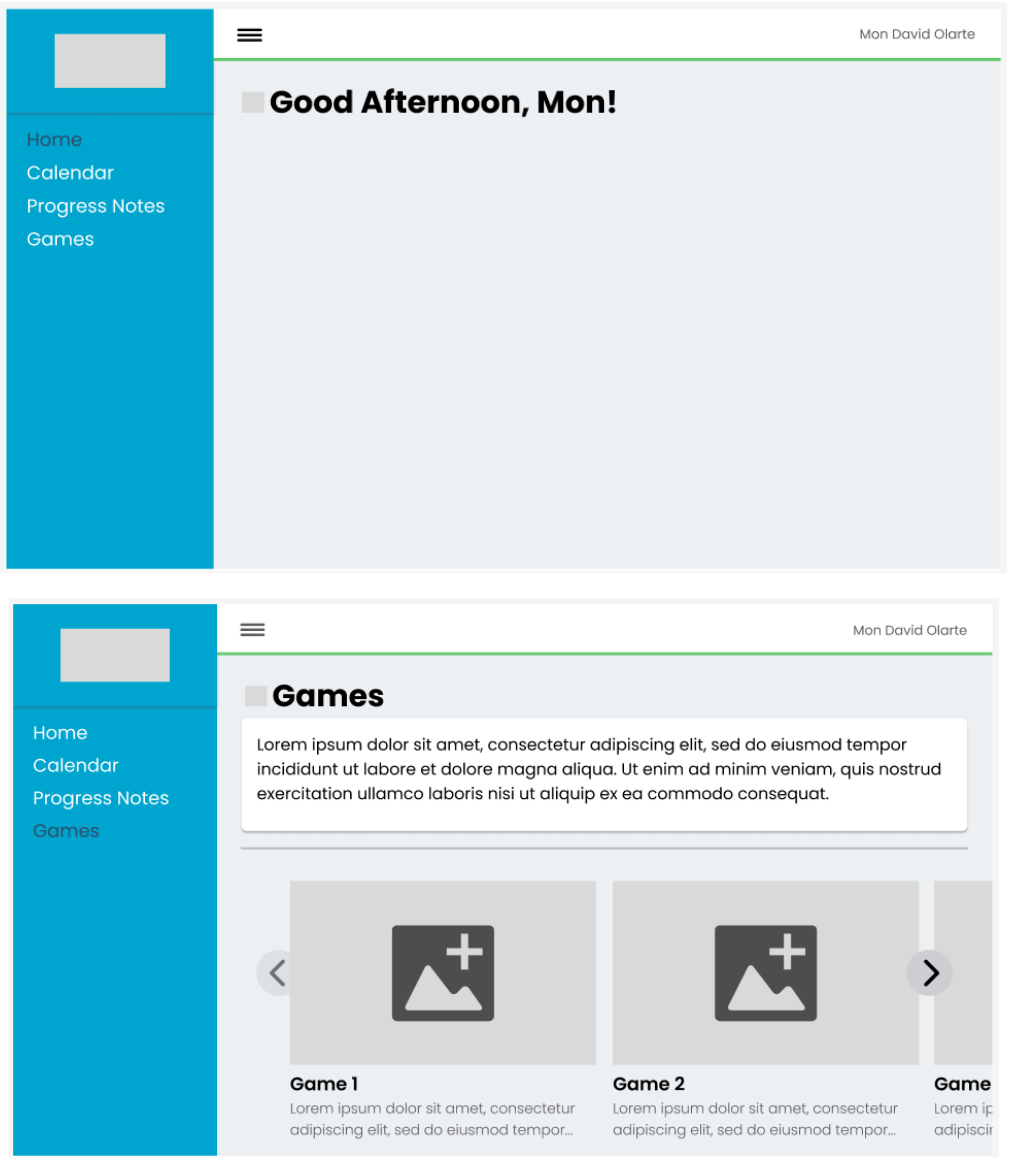
2.9 Updates of Contents in Project GitHub Repository

https://github.com/APC-SoCIT/APC-2024-2025-T1-03-Occupational-Therapy-Clinic.git





2.10 Prototype



2.10.1 Technology Stack

1. Frontend:

- **HTML, CSS, JavaScript**: Standard web technologies for structure, styling, and interactivity.
- **Bootstrap CSS**: For responsive design and pre-built components.
- **JavaScript Framework** (optional): Vue.js, React, or Alpine.js for enhancing frontend interactivity.

2. Backend:

- **Django Framework** (Python): For building the main web application and handling server-side logic.

3. Database:

- **SQLite**: Used for development and testing (typically replaced by PostgreSQL in production).

4. Authentication:

- **Django Allauth**: For handling user authentication, sign-up, and login.

5. Version Control:

- **Git**: For tracking changes in code.
- **GitHub**: Remote repository for collaboration, version control, and continuous integration.

6. Hosting & Deployment:

- **Amazon AWS:** For hosting the website in a cloud environment

2.10.2 GitHub Project Repository

The link below is the group's GitHub repository, which serves as their collaborative space and version control for their project.

GitHub repository link: https://github.com/APC-SoCIT/APC-2024-2025-T1-03-Occupational-Therapy-Clinic.git

2.11 Conclusion

The development of the Therapro Therapy Clinic web portal marks a significant step towards enhancing the efficiency and accessibility of occupational therapy services. By integrating AR-based gamified activities and streamlining administrative processes, the proposed system addresses the clinic's current limitations, such as manual scheduling and the lack of an online presence. These improvements will not only enhance patient engagement and therapy outcomes but also expand the clinic's reach to patients beyond its physical location.

Furthermore, the portal's secure and scalable infrastructure ensures that sensitive patient data is well-protected, supporting long-term growth and adaptability for future updates. As a result, Therapro will be better equipped to manage its resources, improve patient satisfaction, and provide innovative therapy solutions that align with modern healthcare trends, ultimately achieving a 20% increase in patient volume within a year.

The successful implementation of this project can serve as a blueprint for other small clinics aiming to modernize their operations while enhancing the patient experience through technology.

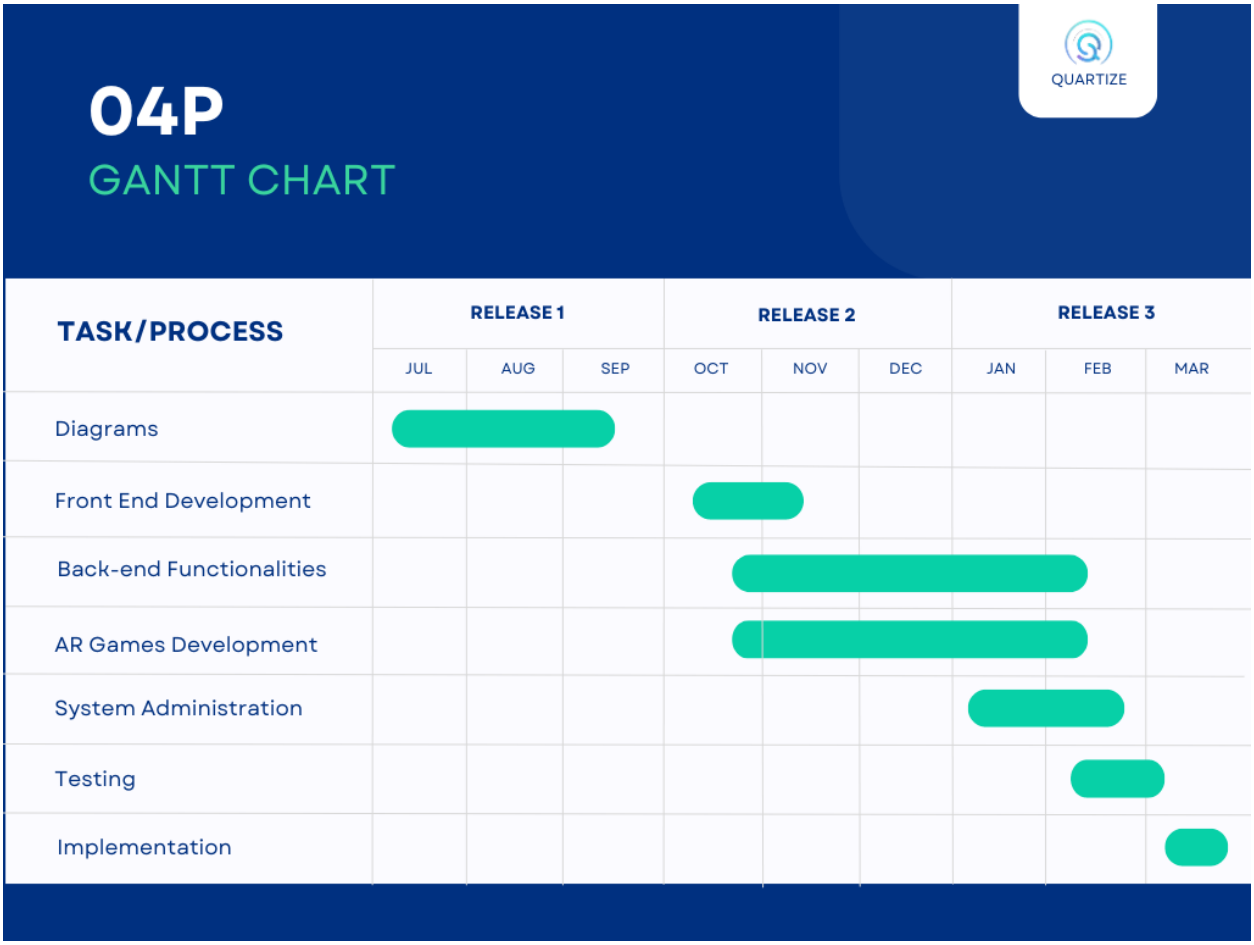
Appendices

Appendix A: Project Vision

PRODUCT VISION

For	The staff at Therapro Therapy Clinic
Who	Are looking for a more efficient and innovative system to manage both scheduling and patient care, including appointments, therapist and patient availability, and overall patient management, while also allowing for a more flexible approach to delivering therapy sessions.
TheraPro Online Portal	Is a web-based portal
That	Will not only streamline the process of scheduling appointments through automation and allow the assistant to view the therapist and patient's schedule and remind them of their upcoming appointments but will also allow the clinic to hold their therapy sessions online through the use of gamified activities available in the portal, leading to a more accessible mode of treatment.
Unlike	the clinic's current traditional face-to-face therapy sessions, manual process of paper-and-pen scheduling and record-keeping.
Our Product	will not only offer real-time views of the therapist and patient's schedule, eliminating the need for manual updates and ensuring everyone is on the same page, but it will also foster a flexible yet engaging environment that allows the therapist to optimize patient outcomes.

Appendix B: Schedule



Appendix C: Release Plan

The project will be broken down into 3 terms of the Project Based Learning series, to see the product roadmap refer to appendix B. For a more detailed view of the timeline of the release plan, refer to appendix A for the Gantt chart of the project.

Target Group: Therapro Therapy Clinic

Goal: Implement a user-friendly web-based portal to streamline patient communication, improve appointment scheduling efficiency, and enhance therapy experiences through AR games.

Needs:

- Reduce administrative burden associated with appointment scheduling and communication.
- Improve patient engagement and access to information.
- Provide therapists with efficient tools for managing patient care.
- Make online sessions available to accommodate more patients outside the geographical area of the clinic.

Value:

- Increased operational efficiency for the clinic.
- Improved patient satisfaction and communication.
- Enhanced therapy experience through interactive AR games.
- Be able to hold online sessions with the addition of interactive AR games

Key Features:

Release 1

- Use Case Diagram
    - Users:
        - Guardian
        - Patient
        - Therapist
        - Assistant
        - Administrator
- Data Flow Diagrams:
    - Level 0
    - Level 1
    - Level 2
        - User Management
        - Appointment Scheduling
        - Therapy Session
        - WAR (Web-based Augmented Reality) Games
- Activity Diagrams:
    - Processes in the Fully Dressed Use Case

- Entity-Relationship Diagram
    - Included entities:
        - User Account Information
        - Patient Information
        - Therapist Information
        - Assistant Information
        - Administrator Information
        - Appointment Information
        - Progress Notes Information
        - Game Library Information
            - Save Progress Information

Release 2

- Secure Login and Access Control
- Patient Portal:
    - View Appointment Schedule
    - Secure Communication with Therapists (optional)
    - Manage Profile Information
- Therapist Dashboard:
    - View Patient List (basic information)
    - Manage Appointments (schedule, reschedule, cancel)
    - Secure Communication with Patients (optional)
- Appointment Booking System:
    - Online Appointment Scheduling for Patients
- Therapist Dashboard Enhancements:
    - View Detailed Patient Records
- AR Therapy Game Integration:
    - Library of Interactive AR Games for Patients
    - Therapist Assignment of Specific AR Games

Release 3

- Updated Appointment Booking System:
    - Appointment Reminders and Notifications
- Updated Therapist Dashboard Enhancements:
    - Secure Document Upload and Storage (e.g., therapy plans)
- Patient Portal Enhancements:
    - Progress Tracking Tools (optional)
- Updated AR Therapy Game Integration:
    - Patient Progress Tracking within AR Games
    - Secure Data Storage and Management for AR Game Data
- System Administration:
    - User Management (add/edit/delete)
    - Basic Reporting (e.g., appointment statistics)

Appendix D: Product Roadmap

TABLE

PRODUCT ROADMAP

SNTSDEV	***SSYADD1***	***SCSPROJ***
Finding a Client • Interview • Collect general information • Identify pain points	**Design and Documentation Artifacts** • Data flow diagrams • Fully dressed use case diagrams • Test cases • Activity diagrams **Website/Portal** • Website design • Patient portal • Therapist dashboard	**Games Integration** • Designing • Developing • Testing
Project Proposal • Documentation • Prototype	**Functionalities** • Account creation • Role Based Access Control • System administration	**Portal Finalization** • Security improvements • Appointment booking system • Website testing and debugging

Appendix D: Minutes of the Meetings

TEAMS MEETINGS

Date	Minutes of the Meeting
August 12, 2024	• Discuss tasks and assignments • Discuss possible consultants, while Kai will fill out the consultant form • Look back at the previous Use Case Diagram and recall the panelists' suggestions • Everybody will research frameworks and discuss with the rest of the group next meeting
August 16, 2024	• Assigned DFD levels to each team member. • Level 0 assigned to Jan Michael Villeza, Level 1assigned to Liam Supremo, Level 2 assigned to Mon David Olarte. • Completed Level 0 and Level 1 diagrams, waiting for review by adviser. • The group worked on Level 2 diagram together and completed it. • Discussed when to ask for an adviser meeting.
August 22, 2024	• Kai will review the comments and suggestions of the advisor, and list down what needs improvement or change. • Quartize will continue making Fully Dressed Use Cases. • Applying the changes needed to the DFD and UCD will be done next meeting. • The next meeting will be on Friday, August 23.

August 29, 2024	• Apply changes to the Use Case Diagram.
	  ○ Based on adviser's comments and suggestions.
	  ○ Based on the group's discussions.
	• Distributed test cases equally among the group. It should be finished before Monday, September 1.
	• The Activity Diagram will be further discussed once the test cases have initial drafts.
	• The next meeting will be on Monday, September 2.

September 25, 2024	• Comments Matrix
	  ○ Review comments and suggestions by panelists.
	  ○ Apply the necessary changes: UCD, DFD.
	• Entity Relationship Diagram
	  ○ Read the recommended articles and watch the recommended videos about ERD to review.
	  ○ Develop ERD.

October 5, 2024	• Update Final Paper from SNTSDEV
	  ○ Product Backlog/User Stories
	  ○ Product Roadmap
	  ○ Release Plan
	  ○ Gantt Chart
	• Hopefully start development next meeting.
	  ○ Set up framework
	• The next meeting will be on Monday, October 7.

October 13, 2024	• Review diagrams for consistency • What to add to partially working prototype • All members are tasked with completing separate tasks: ○ Mon - user registration and backend crud operations

	○ JM - front end user registration and crud operations ○ Liam – initial AR game development ○ Kai - frontend website, rechecking diagrams, final paper • The next meeting will be on October 15, Tuesday.
October 16, 2024	• Continue code of necessary requirements (see last MOTM) • Final paper • Presentation deck • The next meeting will be on October 23, Wednesday.