# I. Overview:

The app is a physical therapy tracking and educational tool designed for use by physical therapy patients. It includes features for exercise tracking, progress monitoring, reminders, communication with therapists, and educational resources.

# II. Features & Functionalities:

## 1. User Authentication:

* Sign up/login functionality using email/password or social accounts.
* Password recovery option.
* Profile creation with personal information (name, age, gender, injury details, therapist's name).

## 2. Home Screen:

* Grid of icons leading to different features: Exercises, Daily Plan, Progress, Reminders, Chat, Settings, and Educational Resources.

## 3. Exercises:

* Library of exercises prescribed by the physical therapist.
* Each exercise includes instructional video, description, and recommended sets/reps.
* Search function to find specific exercises.

## 4. Daily Plan:

* List of prescribed exercises for the day.
* Each listed exercise includes a brief description, thumbnail image, and prescribed sets/reps.
* Option to mark exercises as completed.
* "Complete All" button to mark all exercises as done.

## 5. Progress:

* Interactive graphs/charts tracking improvements in pain levels, range of motion, strength, etc.
* Photo log feature for patients to visually track changes over time.

## 6. Reminders:

* Functionality to set reminders for exercise times.
* Integration with device's native calendar app and push notifications.

## 7. Chat/Support:

* Messaging feature to facilitate communication between patients and their physical therapists.
* Real-time message notifications.

## 8. Settings:

* Option to change reminder times, adjust profile information, and manage notifications.
* Option to deactivate account or delete personal data.

## 9. Educational Resources:

* Library of articles, tips, and advice related to physical therapy, recovery, and overall health.
* Search function to find specific resources.

# III. Technical Requirements:

* The app should be compatible with both iOS and Android platforms.
* Use a cross-platform framework like React Native or Flutter for front-end development.
* Use Firebase for back-end services: Firebase Authentication for user authentication, Firestore for database, and Firebase Cloud Messaging for push notifications.
* Use Firebase Cloud Storage or Amazon S3 for storing user-generated content like photos or videos.
* Implement necessary security measures to protect user data.

# IV. Design & UI/UX Requirements:

* The design should be clean, intuitive, and easy to navigate.
* The color scheme should be calming and comforting.
* Text size should be adjustable for accessibility.
* The app should include a tutorial or onboarding process for first-time users.

# V. Testing & Deployment:

* The app should be thoroughly tested for functionality and usability on various devices and screen sizes.
* The app should be prepared for deployment following the guidelines of the Apple App Store and Google Play Store.
* Any bugs or issues found during testing should be documented and addressed before final deployment.

# VI. Maintenance & Updates:

* The developer should provide maintenance support for a specified period after the launch to address any potential issues and updates.
* The app should be designed with scalability in mind to accommodate future additions and improvements.

# Example Prompts

Would it be possible to leverage ChatGPT to build this app for me? How would I go about getting ChatGPT to generate the code for each step of specs document above? Please give a step by step guide for each section, including example prompt outlines

ChatGPT

As of my knowledge cutoff in September 2021, it's important to note that while GPT-3 and GPT-4 (ChatGPT is based on this model) can generate code snippets and assist with certain programming tasks, they cannot autonomously build an entire application, especially one as complex as the one you're describing.

However, you can use GPT-4 to help generate pieces of code, assist in problem-solving, or brainstorm design and architecture ideas. Here's a step-by-step guide on how you might leverage GPT-4 during different stages of your app development process:

**1. User Authentication:**

Prompt Example: "Generate a code snippet in JavaScript using Firebase Authentication for a simple email and password sign-up and login system."

**2. Home Screen:**

Prompt Example: "Provide a pseudocode outline for designing a home screen in React Native with icons leading to different features like Exercises, Daily Plan, Progress, Reminders, Chat, Settings, and Educational Resources."

**3. Exercises:**

Prompt Example: "Generate a code snippet in React Native for creating a searchable list of items, where each item has a video, description, and recommended sets/reps."

**4. Daily Plan:**

Prompt Example: "Provide a pseudocode outline for a daily plan feature in a mobile app that includes a list of prescribed exercises for the day with the option to mark them as completed."

**5. Progress:**

Prompt Example: "Generate a code snippet in JavaScript for creating an interactive chart using a library like Chart.js, where data can be dynamically updated."

**6. Reminders:**

Prompt Example: "Describe how to implement push notifications in a React Native app using Firebase Cloud Messaging."

**7. Chat/Support:**

Prompt Example: "Outline the steps needed to implement a real-time chat feature in a mobile app using Firebase's Firestore database."

**8. Settings:**

Prompt Example: "Generate a code snippet in React Native for a settings screen that allows users to change their profile information and manage notifications."

**9. Educational Resources:**

Prompt Example: "Provide a pseudocode outline for creating a searchable library of resources in a mobile app."

**10. App Testing & Deployment:**

Prompt Example: "What are the steps involved in preparing a React Native app for deployment to the Apple App Store and Google Play Store?"

Remember to review and refine the code or advice provided by GPT-4, as it may not always provide the optimal or correct solution. While AI can be a powerful tool for software development, human oversight is still crucial for creating a high-quality and reliable application.