Project Documentation: Exercise Program Builder

1. UI Components

The frontend consists of several components that interact with each other to provide the user with a smooth experience for creating and managing exercise programs. Below is an overview of the key components:

App.js

The main container for the application. It holds the state for selected exercises and program details, and it handles logic for adding, updating, deleting, duplicating, and reordering exercises.

It includes child components such as the dropdown for selecting exercises, a list for displaying selected exercises, and a form for entering program details.

Dropdown.js

Displays a list of exercise categories fetched from the backend.

When a user selects a category, the exercises in that category are displayed as options to add to the program.

It passes the selected exercise to the parent component App.js to update the list of exercises.

ExerciseList.js

Displays a list of selected exercises in a drag-and-drop list.

Allows users to reorder exercises, and each exercise is displayed with options to update its details, delete it, or duplicate it.

ExerciseCard.js

Represents an individual exercise card with controls to update sets, reps, hold time, and side (left/right).

Each exercise has a menu that allows the user to edit the exercise details or perform actions like duplicating or deleting the exercise.

ProgramForm.js

A form where users can input program details such as program name, days of the week, frequency, and therapist notes.

The form submits the program data and associated exercises to be saved.

SavedPrograms.js

Displays a list of saved programs from the backend. Users can click on a program to view its details and exercises.

2. Backend API Structure

The backend of the project is built using a REST API to handle requests related to categories, exercises, and saved programs. Below is an outline of the key API endpoints and their functions:

GET /categories

Fetches all exercise categories and their associated exercises.

Returns a list of categories, each containing a list of exercise names.

GET /programs

Retrieves all saved exercise programs from the backend.

Returns a list of saved programs with their details (name, days, frequency, notes, exercises).

POST /programs

Saves a new exercise program to the backend.

Accepts data about the program (name, days, frequency, notes) along with a list of exercises to be included in the program.

Returns the saved program data.