Gym Management System

Service Contract Document

Group: Rome was built in a day

Project Name: Gym Manager

1. Authentication Service

|  |  |
| --- | --- |
| Service Name | Authentication Register |
| Purpose | Allows users to register on the system |
| Input | JSON Body: { "firstname": string, "lastname": string, “email”:string, “phone” number, “password: string, “roles”: array } |
| Output | JSON: { "token": string, "user": { "userId": number, "role": string } } |
| Authentication | Not required |
| Consumers | Mobile App |
|  |  |
| Service Name | Authentication Login |
| Purpose | Authenticates users and issues JWT tokens for secure access. |
| Input | JSON Body: { "email": string, "password": string } |
| Output | JSON: { "token": string, "user": { "userId": number, "role": string } } |
| Authentication | Not required |
| Consumers | Mobile/Web App |

2. Coach Class Services

a) View Assigned Classes

|  |  |
| --- | --- |
| Service Name | Coach Assigned Classes Service |
| Purpose | Retrieve all classes assigned to the logged-in coach |
| Input | None (coach ID derived from JWT token) |
| Output | Array of classes: [{ classId, scheduledDate, scheduledTime, workoutId, coachId, capacity }, ...] |
| Authentication | Required |
| Consumers | Mobile App (Coach view) |

b) Assign Workout to Class

|  |  |
| --- | --- |
| Service Name | Workout Assignment Service |
| Purpose | Assigns a workout to a scheduled class |
| Input | JSON: { "classId": number, "workoutId": number } |
| Output | { "success": true } |
| Authentication | Required |
| Consumers | Mobile App (Coach view) |
|  |  |

3. Member Booking Services

a) View available classes

|  |  |
| --- | --- |
| Service Name | Member Available Classes Viewer |
| Purpose | Allows members to see what classes are available to book |
| Input | None (user ID derived from JWT) |
| Output | Array of bookings: [{ classId, scheduledDate, scheduledTime, workoutName }, ...] |
| Authentication | Required |
| Consumers | Mobile App (Member view) |

b) View Booked Classes

|  |  |
| --- | --- |
| Service Name | Member Booked Classes Viewer |
| Purpose | Allows members to see their class bookings |
| Input | None (user ID derived from JWT) |
| Output | Array of bookings: [{ bookingId, classId, scheduledDate, scheduledTime, workoutName }, ...] |
| Authentication | Required |
| Consumers | Mobile App (Member view) |

c) Book a Class

|  |  |
| --- | --- |
| Service Name | Class Booking Service |
| Purpose | Books a user into an available class |
| Input | JSON: { "classId": number } |
| Output | { "success": true } |
| Authentication | Required |
| Consumers | Mobile App (Member view) |

4.Scheduling Service (Manager)

1. Create a class

|  |  |
| --- | --- |
| Service Name | Class Creation Service |
| Purpose | Creates a class for the scdule |
| Input | JSON: { "capacity": number, "scheduled\_date": date, “scheduled\_time”: time, “duration\_minutes”: number, “coach\_id”: number, “workout\_id”, number} |
| Output | { "success": true } |
| Authentication | Required |
| Consumers | Web app |

c) Assign a coach to a class

|  |  |
| --- | --- |
| Service Name | Coach assignment Service |
| Purpose | Assigns a coach to an available class |
| Input | JSON: { "class\_id”: number, “coach\_id”:number”} |
| Output | { "success": true } |
| Authentication | Required |
| Consumers | Web app |