OVERALL PROJECT DATABASE DESIGN

Designing a database for your gym web app involves defining the tables, relationships, and fields that will store the app's data. Here's a basic database design that you can use as a starting point. Keep in mind that this is a simplified example and should be adjusted to fit your specific requirements:

Tables:

1. Users:

- user\_id (Primary Key)

- email

- password\_hash

- name

- profile\_picture

- membership\_id (Foreign Key to Memberships)

2. Memberships:

- membership\_id (Primary Key)

- plan\_name

- price

- features

- description

3. Classes:

- class\_id (Primary Key)

- class\_name

- description

- instructor\_id (Foreign Key to Trainers)

- capacity

4. ClassBookings:

- booking\_id (Primary Key)

- user\_id (Foreign Key to Users)

- class\_id (Foreign Key to Classes)

- booking\_date

5. Trainers:

- trainer\_id (Primary Key)

- name

- expertise

- profile\_picture

6. WorkoutRoutines:

- routine\_id (Primary Key)

- user\_id (Foreign Key to Users)

- routine\_name

- exercises (JSON or string containing exercise details)

7. Products:

- product\_id (Primary Key)

- product\_name

- description

- price

- stock\_quantity

8. Orders:

- order\_id (Primary Key)

- user\_id (Foreign Key to Users)

- order\_date

- status (e.g., "Pending," "Shipped," "Delivered")

9. OrderItems:

- item\_id (Primary Key)

- order\_id (Foreign Key to Orders)

- product\_id (Foreign Key to Products)

- quantity

Relationships:

- Each user can have one membership, but a membership can belong to multiple users.

- Each user can book multiple classes, and each class can have multiple bookings.

- Each class has one instructor (trainer), but a trainer can teach multiple classes.

- Each user can create multiple workout routines.

- Each product can be part of multiple orders, and each order can contain multiple products.

**Authentication database design**

Sure, here's a basic database design for the sub-app focused on authentication and user management:

Tables:

1. Users:

- user\_id (Primary Key)

- email (Unique)

- password\_hash

- first\_name

- last\_name

- profile\_picture

- is\_verified (Boolean)

- registration\_date

2. MembershipPlans:

- plan\_id (Primary Key)

- plan\_name

- price

- features

- description

3. PasswordResetTokens:

- token\_id (Primary Key)

- user\_id (Foreign Key to Users)

- token (Unique)

- expiration\_date

Relationships:

- Each user can be associated with a membership plan.

- Each user can initiate multiple password reset tokens for password recovery.