

Gym & Padel Management System

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- Main Idea

The system simulates the management of subscriptions and reservations for gym members and organizes the reservation system for the gym's padel courts.

- Structure of system

- User Type: Each user has an email and password to help him log in to his account, he also has a name for the account, his date of birth, data of his subscription , and a variable that stores the location of the account's profile picture and contains some custom data type such as the **slot** he has reserved, **notifications**, classes he is waiting for, and **classes** that have been reserved.
- Staff Type: His responsibilities differ based on his role. There are three possible roles: manager, receptionist, and coach. Each staff member has a password, email, username, a variable for the profile picture location, and a variable indicating their position. If the staff member is a coach, this also includes the class ID they are assigned to.

- Gym Class type : Each gym class has class Id , class name , instructor , instructor Id , start date , end date, price ,type of subscription allowed to enter this class , max number of member and session added by manager , it also includes a waitlist and a membership list, which are updated based on actual users who join.
- Padel Court type : Each court has a court ID, name, location, price, and a list of reserved slots.
- Credit Card type : Each card includes an ID , CVV , Name , Expiration date and amount
- Workout type: Each workout has Id , type , duration and count of calories burned
- Subscriptions type: Each subscription includes a type, start date, end date, price, and two variables to indicate whether the account is activated and whether it has VIP status.
- Slot type : Each slot includes an Id ,court name , date of slot and start time.

- Notification type: Each notification includes an ID, message, the date and hour it was sent, and a Boolean value indicating whether the message has been read.