Requirements	Assumptions	Representation in ER Model
Members are able to register and manage their profiles, view the dashboard display, and schedule management. They are identified by a unique ID.	Members can only get trained by 1 trainer at once.	Members Entity: Attributes include MemberID (PK), CVV, ExpirationDate, CardNumber, Age, Gender, HeightCM, WeightKG, FitnessGoals, Email, LastName, FirstName
Trainers have set times they are available and manage schedules and also view member profiles.	N/A	Trainers Entity: Attributes include TrainerID (PK), Name, Specialization, ExperienceYears.
Each Trainer has multiple members to train throughout each day.	A single trainer may have multiple members but can't train them at the same time.	Links 1 trainer with multiple members with a N to 1 relation.
Sessions are booked based on trainer availability. Each session has a unique identifier and has a duration, and a price depending on the exercise.	N/A	Sessions Entity: Attributes include SessionID (PK), Cost, SessionTime.
Trainers have to conduct a session once booked, and trainers can get booked for multiple sessions throughout a day but never overlapping.	There is only one trainer per session.	Links trainers with sessions with a 1 to N relation.
Members can book sessions when they want to work out and which workout they want to do.	Each session is only one member at a time, but a member can have more than one session.	Links members to sessions with a 1 to N relation.
Rooms are used by trainers and members to train and each have a capacity, a status detailing if it is in use.	Rooms can only have a single session and a time.	Rooms Entity: Attributes include RoomID (PK), Name, Capacity, Status.
Each class is held in its appropriate room.	There can only be a class at a time in its equivalent room.	Links the Classes entity with the Rooms entity creating a 1 to 1 relation.
Equipment is used while working out during a session, and is uniquely identified by its id while also recording its quantity, condition and name.	N/A	Equipment Entity: Attributes include EquipmentID(PK), Name, Quantity, Condition.

Equipments are handled and monitored by the current Admin.	N/A	Links the Admins entity with the Equipment entity with a 1 to N relation.
Equipments are stored in a room.	N/A	Links the Rooms entity with the Equipment entity creating a 1 to N relation.
Each trainer has his own availability that is uniquely identified by its availabilityID, and records when each trainer is available, when they are free, and on which day.	N/A	TrainerAvailability Entity: Attributes include AvailabilityID(PK), AvailableDate, Start, End.
Each trainer has a specific availability that will update when each trainer gets booked.	A trainer can't get double booked at the same time.	Links TrainerAvailability with trainer and is a dependent entity with a 1 to 1 relation.
Administrative Staff should manage room bookings, monitor fitness equipment maintenance, class schedule updating, and billing and payment processing.	N/A	Admins Entity: Attributes include AdminId(PK), Username, Password.
Admins organizes all the classes to make sure everything is up to plan and nothing goes wrong.	An Admin at a time can organize the classes and not all simultaneously.	Links the Admins entity with the Classes entity with a 1 to N relation.
Classes are uniquely identified by their own identifier and their name, instructor, and schedule is also recorded.	N/A	Classes Entity: Attributes include ClassID(PK), Name, Instructor, Schedule.
Each class can host multiple sessions throughout the day.	There can never be more than 1 session at the same time in the same class.	Links Session with Classes with a N to 1 relation.