10112258

is stored as

is stored as

Height

Email

Weight

Last name

monthlyFeePaid

First name

ID

routineDetails

MemberID

ExerciseID

exerciseRoutine

gets

1

Member

*

does

Participates in

*

memberNotifications

1

member_id

created_at

ID

message

Sets

leads

*

*

*

goals

sessions

goalDate

goalType

roomNumber

TrainerID

ID

memberID

sessionType

ID

goalValue

achieved

sessionDate

sessionTime

*

rooms

*

holds

room_number

ID

available

gets

trainerNotifications
*

trainer_id — created_at

ID — message

trainingSessionParticipants
*

memberId — participant_id

sessionId

groupClassParticipants
*

memberId — participant_id

sessionId

equipment

ID — equipment_name

last_maintenance_date

1

Trainers

1

first_name — ID

last_name — email

password

1

admins

email — ID

password

payments

member_id — ID

amount — payment_date

admin_bookings

room_number — booking_id

booking_date

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payment

id	member_id	amount	payment_date

memberNotifications

id	member_id	message	created_at

Members

id	first_name	last_name	height	weight	password	email	monthlyFeePaid

exerciseRoutine

id	memberId	routineDetails

goals

id	memberId	goalType	goalValue	achieved	goalDate

trainerNotifications

id	trainer_id	message	created_at

trainers

id	first_name	last_name	password	email

sessions

id	trainerId	roomNumber	sessionType	sessionTime	sessionDate

trainingSessionParticipants

participant_id	memberId	sessionId

groupClassParticipants

participant_id	memberId	sessionId

rooms

id	available	room_number

equipment

id	equipment_name	last_maintenance_date

admin

id	email	password

admin_bookings

booking_id	room_number	booking_date

Conceptual Design

Requirement	Assumption	Representation in ER Model
Members register with the system.	Each member has a unique email ID.	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Members can log in with the system.	The member who wants to log in knows their email and password	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
User can manage their profiles	The member wants to update personal information, fitness goals, and health metrics	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Goal Management	Each goal is associated with a member identified by memberId	Goal Entity: Attributes include id (PK), memberId (FK), goalType, goalValue, goalDate, achieved.
Members can book Sessions	Each session is associated with a trainer identified by trainerId and a sessionid.	Session Entity: Attributes include id (PK), trainerId (FK), roomNumber, sessionType, sessionDate, sessionTime.
Members can rescedule their already booked training sessions	Members can reschedule personal training sessions based on the trainer's availability.	TrainingSessionParticipant Entity: Attributes include memberId (FK), sessionId (FK).
Memebers can cancel booked session	Members are have prevously book a session to be canclled	TrainingSessionParticipant and groupClassesParticipant Entity: Attributes include memberId (FK), sessionId (FK).
Members goals can become achevements	Goals completed by members become achievements. Members can update their already created goals to become acheivements	Goal Entity: Attributes include id (PK), memberId (FK), goalType, goalValue, goalDate, achieved.
Notifications	Members and trainers receive notifications regarding their sessions.	MemberNotifications and trainerNotifications Entity: Attributes include id (PK), memberId (FK), notificationMessage, notificationDate.
Exercise Routine Creation	Members can creates exercise routines	ExerciseRoutine Entity: Attributes include id (PK), memberId (FK), routineDetails.
Dashboard Display	Members can view a personalized dashboard showing their progress, achievements, and health metrics.	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Creating sessions	Trainers can create sessions which will have unique sessions id	Session Entity: Attributes include id (PK), trainerId (FK), roomNumber, sessionType, sessionDate, sessionTime.
Modifying sessions	Trainers and admins can modify innformation about sessions	Session Entity: Attributes include id (PK), trainerId (FK), roomNumber, sessionType, sessionDate, sessionTime.
Viewing members	Trainers wants to search for members that are registered with their first name or first and last name	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Heart Rate Tracking (BONUS)	Members can track their heart rate during workouts	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Workout Timer (BONUS)	Members can start a timer for their workouts	Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Trainer Login	Trainers can log in using their email and password credentials.	Trainers Entity: Attributes include id (Primary Key), first_name, last_name, email (Unique), password.
Send Notifications	Trainers can send notifications to members about session updates.	memberNotifications table in the database stores notifications sent to members.

		session update.		notifications sent to member.
Admin Login		Admin can log in using their email and password credentials. The is only one admin since i would prefer to have it structured that way		Admins Entity: Attributes include id (Primary Key), email (Unique), password.
Trainer Creation		Admins can create new trainers by providing their details.		Admins Entity: Attributes include id (Primary Key), email (Unique), password. Trainers Entity: Attributes include id (Primary Key), first_name, last_name, email (Unique), password.
Room Booking Management		Admins can manage room bookings, including booking, canceling, and refreshing room availability.		Rooms Entity: Attributes include id (Primary Key), room_number (Unique), available.
Equipment Maintenance Monitoring		Admins can monitor equipment maintenance and update maintenance dates.		Equipment Entity: Attributes include id (Primary Key), equipment_name, last_maintenance_date
Add Equipment		Admins can add new equipment to the system.		Equipment Entity: Attributes include id (Primary Key), equipment_name, last_maintenance_date
Session Management		Admins can view, update, and send notifications regarding training sessions.		Sessions Entity: Attributes include id (Primary Key), trainerId (Foreign Key), roomNumber, sessionType, sessionDate, sessionTime.
Billing/ Collect Monthly Fees		Admins can collect monthly fees from members who have not paid.		Payments Entity: Attributes include id (Primary Key), member_id (Foreign Key), amount, payment_date.
BMI (BONUS)		Members can calculate their BMI		Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.
Blood pressure calculator (BONUS)		Members can calculate their Blood pressure		Member Entity: Attributes include id (PK), first_name, last_name, email , password, height, weight, monthlyFeePaid.