

Gym Management System ER Diagram

The **gym management system ER diagram** shows the relationships of the system's entities that build its **database design**. ER diagram describes the logical structure of the system's database or data storage. It is done by identifying the gym management process entities, their properties, and the interactions between them.

The **gym management system database design** is sketched out using **ER (entity-relationship) diagram**. This sketch becomes the actual basis of the system's data storage that will serve as data destination and source.

What is Gym Management System?

This system for managing gyms and clubs give organizations in the fitness industry the ability to control schedules, memberships, and facilities. Gym management systems provide the ability to schedule lessons, reserve facilities, manage financial records, and store member information in a database.

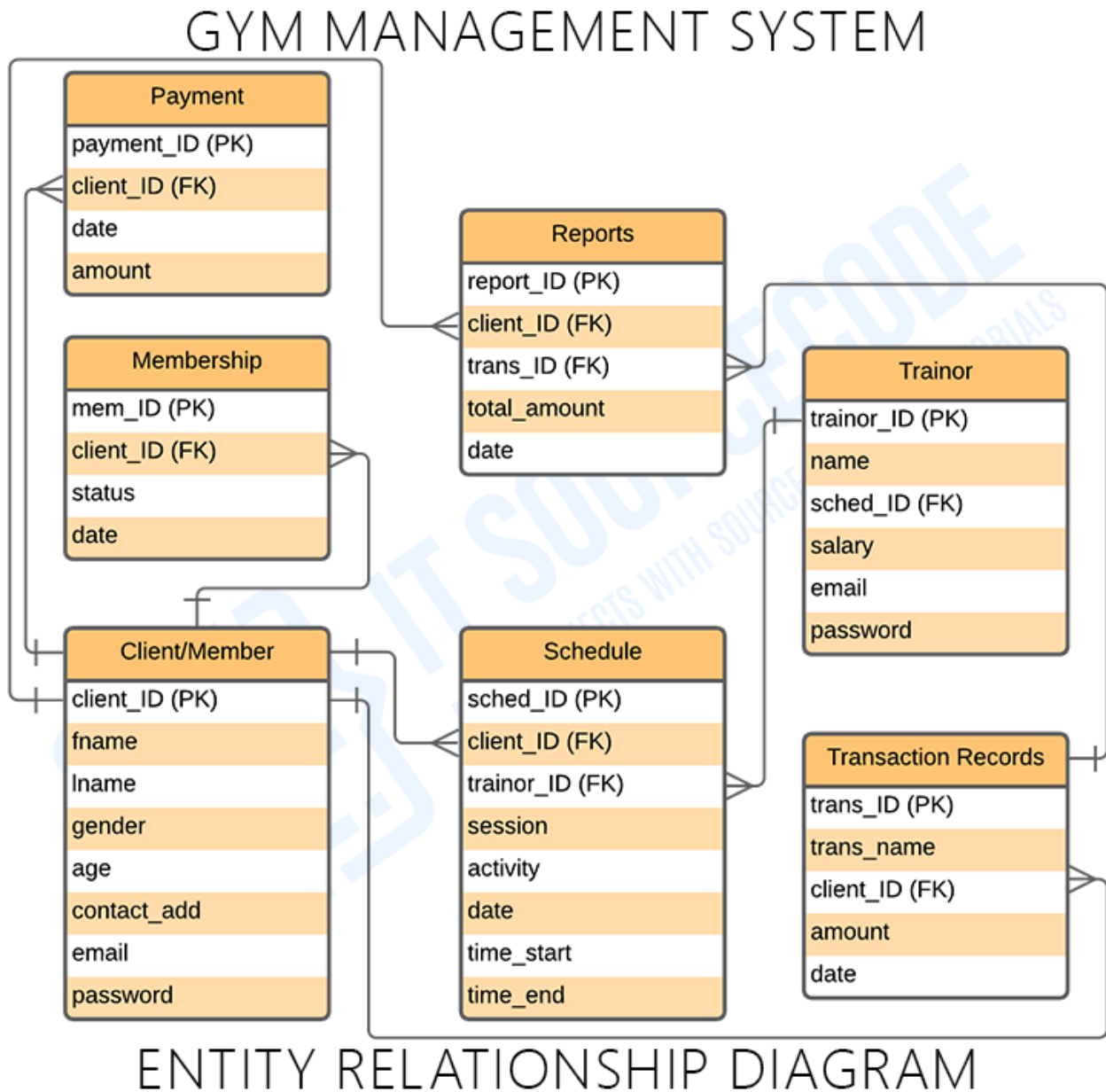
Gym management software (fitness software) is made to make running a health club simpler. The program gathers all data into one location, including administrative responsibilities, automated billing, and online gym scheduling, allowing you to manage your business more effectively.

Gym Management System Features

- **Gym Management** - This feature can keep track of schedules, memberships, and amenities of the clients when entering or availing of the Gym services.
- **Client Management** - This feature in the Gym management system can store members' or client information, manage financial and payment records, schedule classes and sessions, and reserve facilities. It will also help in memberships and class schedules as well as to keep track of the clients, trainers, and schedules.
- **Manage Reports** - This reports management will help the gym administrator to have the timely and relevant information which are needed for every monitoring purpose. It could also help in tracing every transaction done in the system. Managing the Reports will provide security to the valuable information that may be used to generate future projections and improve their services.
- **Manage Transactions** - The transaction management is in charge of creating and associating transaction activities up-to-date. This feature will also help in solving issues on the customers' side and ensure that transactions were all correct and updated.
- **Transaction and Reports Management** - This feature will store the transactions made by the gym members and clients including their information and the reports of every transaction and timetables. The feature is essential in gym management software.

ER Diagram for Gym Management System

The ERD or **ER Diagram for Gym System** shows the system entity relationships in each entity and their supposed functions in each relationship. Now here's the sample ER Diagram of Gym Management System.



Gym Management System ER Diagram

Based on the image above, the **Entity-Relationship Diagram for Gym System** is the blueprint of the **Gym System database**, and these are presented in **tables**. The tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

The purpose of this ER Diagram is to fully understand the Gym Management System as well as the relationships of tables in the project database design. And if you like to have a reference for your project making, you can have the PDF copy of this Gym Management System ER Diagram.

Gym Management System Database Design

This **Gym Management System** database design was made based on managing Gym requirements. The system can secure and monitor the activities and advise exercises for the gym clients and their sessions or time schedules. The gym admin can have access to the clients' status, checking their activities, and secure the clients' every activity.

The features included in this Gym Management system's ERD were securing and monitoring the card holders' transaction records and status. These features were also listed and recorded in reports that served as the history of all the activities done in the system.

Gym Management System ER Diagram Tables

These tables below provide the complete database table details such as **Field Name, Descriptions, data types, and character lengths**. Each of these tables represents the characteristics and the attributes of data storage. The **field** column presents the names of each database's attributes, the **description** column gives the complete thought of each attribute, the **type** column is their data type and the **length** is for their character lengths.

Table Name: Client/Member

Field	Description	Type	Length
client_ID (PK)	Client ID	Int	11
fname	Client First Name	Varchar	255
lname	Client Last Name	Int	11
gender	Client Gender	Text	
age	Client Age	Int	11
contact_add	Contact Address	Int	11
email	Client Email	Varchar	255
password	Client Password	Varchar	255

Table Name: Registration/Membership

Field	Description	Type	Length
reg_ID (PK)	Registration ID	Int	11
name	Name	Varchar	255
status	Registration Status	Varchar	255
date	Date of Registration	Date	

Table Name: Transaction Records

Field	Description	Type	Length
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trans_ID (PK)	Transaction ID	Int	11
trans_name	Transaction Name	Varchar	30
client_ID (FK)	Client ID	Int	11
amount	Amount	Int	11
date	Date of Transaction	Date	

Table Name: Schedule

Field	Description	Type	Length
sched_ID (PK)	Schedule ID	Int	11
client_ID (FK)	Client ID	Int	11
trainer_ID (FK)	Trainer ID	Int	11
session	Session	Varchar	30
activity	Activity	Varchar	30
date	Date	Date	
time_start	Starting Time	Varchar	30
time_end	Time Ends	Varchar	30

Table Name: Trainor

Field	Description	Type	Length
train_ID (PK)	Trainer ID	Int	11
name	Trainer Name	Varchar	30
sched_ID (FK)	Schedule ID	Int	11
salary	Salary	Varchar	30
email	Trainer Email	Varchar	30
password	Trainer Password	Varchar	30

Table Name: Reports

Field	Description	Type	Length
report_ID	Report ID	Int	11
client_ID (FK)	Client ID	Int	11
trans_ID (FK)	Transaction ID	Int	11
total_amount	Total Amount	Int	11
date	Date of Report	Date	

The tables given will be the basis for developers on how would they do the **gym management system database design**. It has the complete description of the database and they will put this into the program or data storage the same as the names given to each of the tables. They will create a database with the attributes given as well as the value of each attribute.