

PROJECT REPORT

Members:

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Description:

Gym database management system for a single gym. It helps the gym to manage Members, Employees, Trainers, Membership Levels as well as to keep a record of payments made by members.

Queries:

Simple

1. Add member
2. Delete member with id = x
3. View member with id = x
4. Add Employee
5. Remove Employee with id = x
6. View employee with id = x
7. Add trainer
8. Delete trainer with Emp_id = x
9. View trainer with Emp_id = x
10. Add payment
11. Delete payment with id = x
12. View payment with id = x
13. Add Membership Tier

Complex

1. Get all members who have been members since x and tier cost \geq y
2. Get all members who haven't paid since x
3. Get trainers specializing in x with salary \geq y
4. Get the average salary for each specialization of trainer
5. Find number of people in each tier

SQL Commands for Queries:

Simple

1. INSERT INTO Members (id, Name, Date_Joined, Tier_Name)
2. DELETE FROM Members WHERE id = x
3. SELECT * FROM Members WHERE id = x
4. INSERT INTO Employees (id, Name, Date_Joined, Salary)
5. DELETE FROM Employees WHERE id = x
6. SELECT * FROM Employees WHERE id = x
7. INSERT INTO Trainers (Emp_id, Specialization)
8. DELETE FROM Trainers WHERE id = x
9. SELECT * FROM Trainers WHERE id = x
10. INSERT INTO Payments (id, Date_Paid, Member_id, Amount)
11. DELETE FROM Payments WHERE id = x
12. SELECT * FROM Payments WHERE id = x
13. INSERT INTO Tiers (Name, Cost)

Complex

1. SELECT id, Members.Name, Date_Joined, Cost as Tier_Cost FROM Members, Tiers WHERE Tier_Name = Tiers.Name AND Tier_Cost >= y AND Date_Joined >= x
2. SELECT * FROM Members WHERE Members.id NOT IN (SELECT Members.id FROM Members, Payments WHERE Members.id = Member_id AND Date_Paid >= x)
3. Select id, Name, Specialization, Salary FROM Trainers, Employees WHERE Emp_id = id AND Specialization = x AND Salary >= y
4. SELECT Specialization, AVG(Salary) FROM Trainers, Employees WHERE Emp_id = id GROUP BY Specialization
5. SELECT Tier_Name, COUNT(id) FROM Members, Tiers WHERE Tier_Name = Tiers.Name GROUP BY Tier_Name