

DBMS LAB REPORT

Synopsis of GYM Management System

Title: Gym Management Database System

Objective: The objective of the Gym Management Database System is to provide a comprehensive and efficient solution for managing gym members, trainers, and available supplements. It aims to automate various operations such as member registration, trainer assignment, supplement selection, and pricing management.

Operational Definition:

Members: The database table storing information about gym members, including their unique ID, name, joining date, contact information, supplement option, supplement foreign key, training option, trainer ID, and gym price.

Trainers_Available: The table containing details about available trainers, including their ID, name, contact information, and fee.

Supplements_Available: The table storing information about the available supplements, including their ID, prices, and a grand total.

Hypothesis: The Gym Management Database System assumes that the gym operates with multiple members, trainers, and available supplements. It assumes that members can select supplements, opt for training, and be assigned to specific trainers. Additionally, it assumes that gym prices can be updated based on training options chosen by members.

Materials and Methods:-

Database Creation: The code begins by creating a new database named "Vishal_pal_GYM_DBMS" and setting it as the active database.

Table Creation: The code creates three tables: Members, Trainers_Available, and Supplements_Available. These tables define the structure and relationships between different entities.

Data Manipulation: The code inserts sample data into the tables to populate them with initial records.

Stored Procedures: The code includes stored procedures to perform common operations like inserting, updating, and deleting records from the Members table.

Trigger: A trigger named "UpdateGymPrice" is created to automatically update the gym price when the training option is modified.

SQL Queries: The code includes various SQL queries to retrieve data from the tables, including joins between Members, Trainers_Available, and Supplements_Available.

Stored Procedure for Join: A stored procedure named "GetMembersWithTrainers" is created to retrieve information about members along with their assigned trainers.

In summary, the Gym Management Database System provides a structured approach for managing gym-related data, including member details, trainer information, and available supplements. It allows for easy retrieval and manipulation of data, simplifying administrative tasks and improving efficiency in gym operations.

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