Muscle Freak Gym Management System: How It Works

The Muscle Freak Gym Management System is a comprehensive web application designed to seamlessly manage gym operations, classes, members, and more. The system utilizes a combination of HTML, CSS for the front end, PHP for the backend, and SQL for the database. This robust architecture ensures a user-friendly experience for both members and administrators.

Database Structure

The SQL database consists of 10 tables, each serving a specific purpose:

1. Members Table: Contains essential member information, such as name, sex, contact number, email (primary key), gym and yoga flags, password, and date of birth.

2. Emergency Contact Table: Records emergency contact details with a foreign key relationship to the Members Table.

3. Class Table: Stores information about classes, including Class ID, time, hours, and day. It has two subclass tables, GymClass, and YogaClass, each keeping track of gym and yoga classes with additional attributes for class types and instructor IDs.

4. Instructors Table: Holds details of gym and yoga instructors, including Instructor ID (primary key), name, sex, date of birth, contact number, and flags indicating their expertise.

5. Review Table: Captures member reviews with Review ID as the primary key and an email foreign key referencing the Members Table.

6.Payment Table: Records payment details, including Payment ID (primary key), email foreign key referencing the Members Table, date, and subscription duration.

7. Takes_Classes Table: Manages the enrollment of members in classes, utilizing email and Class ID as primary and foreign keys, respectively.

8. Login Table: Facilitates user authentication with a primary key and foreign keys referencing email and password, both connected to the Members Table.

Front-End Experience

When users enter the website, they are greeted with images of the gym, class timings, and other relevant information. The class timings are dynamically fetched using SQL join functions between the Class and Instructors tables. The number of people attending the gym is displayed using the SQL group by function.

Users can explore reviews and gym packages, fostering transparency and informed decision-making. To join the gym, users register by providing necessary information for the Members, Takes_Classes, and Payment tables. After registration, users log in, gaining access to a personalized dashboard.

User Interaction

Once logged in, users can view and modify their personal details, emergency contact information, and class enrollment. They have the ability to submit reviews, enhancing the sense of community. After completing their activities, users can log out securely.

Admin Panel

Administrators experience a distinct interface with CRUD (Create, Read, Update, Delete) functions for all key tables. This includes Members, GymClass, YogaClass, Class, and Instructors tables, offering complete control over the system.

User Authentication

Different user interfaces for members and admins are achieved through a user authentication system. Hosting a server enables secure logins and logouts, allowing users to access their designated interfaces seamlessly.

In conclusion, the Muscle Freak Gym Management System is not only a practical solution for gym management but also a testament to the potential of technology in transforming traditional industries. Its user-centric design and functionality ensure a seamless experience for both members and administrators.

Contributions to the Project

Md. Aziz Raihan
-Student ID: 2132681042
1. Front-End Development:
  - Designed and implemented half of the front-end dashboard visible to users without logging in, ensuring a user-friendly interface.

2. Database Development:**
  - Created and structured the SQL database, playing a key role in defining tables and relationships to ensure efficient data management.

3. Admin Panel Implementation:
  - Developed the full admin panel with CRUD (Create, Read, Update, Delete) functions, providing administrators with comprehensive control over the system.

4. EER Diagram:
  - Designed the Entity-Relationship (EER) diagram, incorporating a dashboard for the admin to visually represent the relationships and structure of the database.

Amiur Rahman
- Student ID: 2131466642
1. Front-End Development:
  - Developed and designed the remaining half of the front-end dashboard visible to users without logging in, contributing to the overall aesthetic and functionality.

2. Database Conceptualization:
  - Provided the initial idea for the database structure, contributing to the conceptualization of tables and their attributes.

3. Relational Diagram:
  - Created the initial relational diagram, outlining the connections and dependencies between different tables in the database.

4. Server and User Panel Development:
  - Implemented the server to facilitate different interfaces for admins and users, creating a secure login/logout system. Developed the full user panel, including the profile page within the dashboard and an update function.

Together, our collaborative efforts resulted in the successful development and implementation of the Muscle Freak Gym Management System.