# FITNESS MANAGEMENT SYSTEM FOR GRANDE FITNESS

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# STUDENT DECLARATION

This is to certify that I have completed the Project entitled "Fitness Management System for Grande Fitness" under the guidance of "**Mr. Sandesh Bohora"** in partial fulfillment of the requirements for the degree of **Bachelor of Information Management** at the Faculty of Management, Tribhuvan University. This is my original work and I have not submitted it earlier elsewhere.

Date: May, 2025

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# CERTIFICATE FROM THE SUPERVISOR

This is to certify that the project entitled “Fitness Management System” is an academic work done by “Nabin Bk” submitted in the partial fulfillment of the requirements for the degree of **Bachelor of Information Management** at Faculty of Management, Tribhuvan University under my guidance and supervision. To the best of my knowledge, the information presented by him/her in the project report has not been submitted earlier.

Signature: ……
Name: Sandesh Bohora
Date: May, 2025

# APPROVAL SHEET

**Will Provided by College**

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# ABSTRACT

This report presents the design and development of a Fitness Management System for Grande Fitness using PHP and MySQL. The platform provides a comprehensive solution for managing gym memberships, class schedules, trainers, and user profiles through an interactive and responsive web interface. Key features include user and admin authentication, workout plan, service listings, contact forms, and a dashboard for managing members and booking. The system was developed through a systematic process, including requirement gathering, database design, interface development, and thorough testing. The project aims to streamline fitness club operations while enhancing user engagement and administrative efficiency through a reliable and scalable web application.

**Key words:** *Fitness Club, Web-based Application, PHP & MySQL, Admin Dashboard, Membership Management, Booking System, Fitness Plan Booking*

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| | |
|---|---|
| CSS | Cascading Style Sheets |
| CRUD | Create, Read, Update, Delete |
| DB | Database |
| GUI | Graphical User Interface |
| HTML | Hyper Text Markup Language |
| JS | JavaScript |
| PHP | Hypertext Preprocessor |
| SEO | Search Engine Optimization |
| SQL | Structured Query Language |
| UML | Unified Modeling Preprocessor |
| XAMPP | Cross-platform, Apache, MySQL, PHP, Perl |

# CHAPTER I: INTRODUCTION

## 1.1 Background

In recent years, the fitness industry has rapidly embraced digital transformation as more people seek convenient and personalized ways to manage their health and fitness routines. With the widespread use of smartphones and internet access, users now expect online platforms that allow them to interact with gyms and fitness centers without needing to visit in person. Digital fitness management systems help streamline member registration, class scheduling, and communication—enhancing both user experience and operational efficiency.

To better understand the real-world needs of a fitness center, I visited Grande Fitness Club, a local gym, and conducted discussions with staff members and administrators. During these interactions, it became clear that the gym faced several operational challenges, such as maintaining accurate member records, managing schedules manually, and handling inquiries through informal channels. These issues often resulted in time-consuming processes, inconsistencies, and limited capacity to expand services or reach a wider client base.

To address these problems, this project aims to develop a comprehensive Fitness Management System using PHP and MySQL. The system includes essential features such as user registration, login, service listings, trainer profiles, schedule management, and a dedicated admin dashboard for handling member data and communication. This platform is designed specifically for fitness clubs like Grande Fitness, offering a structured, reliable, and scalable solution to digitize their operations and improve customer satisfaction.

## 1.2 Problem Statement

Many fitness centers in Nepal, including Grande Fitness, still rely on traditional, manual methods for managing memberships, class schedules, and trainer assignments. These practices often lead to inefficiencies, such as difficulties in tracking member data, scheduling conflicts, and poor communication between staff and clients. Moreover, members have limited access to real-time information regarding available services, trainers, and fitness programs. There is a clear gap in accessible and affordable digital solutions tailored to the operational needs of local gyms, highlighting the necessity for a user-friendly and cost-effective fitness management system.

## 1.3 Objective

### 1.3 General Objective

To develop a web-based system to replace the manual (paper-based) system used by the gym’s management.

### 1.3.2 Specific Objectives

1. To design a user-friendly interface for members to view gym services, trainers, and class schedules online.
2. To enable users to register, log in, and manage their personal profiles and fitness preferences.
3. To provide administrators with a dashboard to manage member data, class schedules, and contact inquiries.

## 1.4 Review of Related Work and Literature

Fitness management systems have become essential tools in improving the operational efficiency of gyms and enhancing customer engagement. Various international systems, such as *Glofox* and *Mindbody*, offer cloud-based fitness center management solutions. These platforms provide features like scheduling, membership tracking, billing, and mobile access (Glofox, 2021). However, such systems often come with high subscription costs, making them less suitable for small and medium-sized fitness centers in countries like Nepal.

According to Sharma and Karki (2022), the adoption of localized digital management tools in Nepalese gyms has been slow due to a lack of awareness and limited technical infrastructure. Nevertheless, studies by K.C. and Maharjan (2021) show that implementing web-based systems using technologies like PHP and MySQL can significantly enhance data management and user experience.

A study by M. Singh (2020) on gym automation tools emphasized that procedural PHP remains effective for small-scale applications due to its simplicity and ease of integration with MySQL databases. Additionally, Bhatta (2019) highlighted that digital member tracking reduces administrative workload by up to 40% in urban fitness centers.

From a global perspective, Choudhury et al. (2020) discussed the importance of personalized digital platforms for improving client retention in fitness services. Another paper by Rao and Sharma (2018) supported the idea that centralized systems streamline attendance, performance tracking, and trainer schedules effectively.

Furthermore, GitHub (2023) and Stack Overflow (2024) repositories have served as practical references for understanding real-world implementations of gym management systems using PHP and MySQL.

This project draws upon these resources to create a cost-effective, customizable, and secure Fitness Management System designed to support the specific needs of local fitness clubs in Nepal.

## 1.5 Development Methodology

The primary methodology used to implement the project is the Agile methodology. The Agile methodology is chosen because it allows for any changes made from time to time

as well as being more flexible than other methodology. The development was carried out in the following key stages:

1. **Plan:** This phase is covered to determine all of the possible plan to achieve the objective of the project. This phase will also include requirement and analysis phase where the requirement gathering is conducted to obtain information for the system. All of the possible requirement is gathered using various techniques such as from observation, interviews and literature reviews.
2. **Design:** In design phase, the layout of the proposed system is designed. The system designs will also include the designs of wireframe, architecture and database.
3. **Development:** The system will be developed by referring to the main system requirement and with the application of HTML and PHP. Each of the webpage will act as a single unit which will be integrated later at the testing phase.
4. **Testing and Iteration:** At the end of each sprint, functional testing was conducted. Bugs were fixed and improvements were made before proceeding to the next module.
5. **Final Review and Deployment:** After completing all modules, the system was tested as a whole, and final adjustments were made based on feedback from test users.

## 1.6 Scope and Limitation

### 1.6.1 Scope:

1. Design and development of a web-based fitness management system for Grande Fitness Club.
2. Functionality for user registration, login, and secure session management.
3. Features to allow members to view gym services, trainer profiles, and class schedules.
4. Admin panel for managing member data, trainer assignments, class schedules, and inquiries.
5. Developed using PHP and MySQL for a stable, scalable backend solution.

### 1.6.2 Limitations:

1. The system does not currently support real-time communication features like live chat or video consultation with trainers.
2. No mobile application has been developed; the system is web-based only.
3. Advanced personalization features like **AI-based recommendations** and **customer reviews/ratings** are not included in this version.
4. System scalability may require optimization if used by multiple branches or a significantly larger member base.

## 1.7 Report Organization

This report is structured into three main chapters, each serving a specific purpose in documenting the development of the Fitness Management System website:

**Chapter I – Introduction:**

This chapter introduces the project by providing the background and motivation behind its development. It outlines the core problem the system aims to address, defines the general and specific objectives, and presents a review of existing literature and related systems. It also discusses the development methodology (Agile) adopted for the project and describes the overall scope and limitations of the system. Finally, it provides an overview of how the report is organized.

**Chapter II – System Development Process:**

This chapter covers the technical aspects of the project. It begins with requirement analysis and feasibility study, followed by system modeling and design, including database structure and user interface planning. It also describes the tools and technologies used (PHP, MYSQL), details the implementation of key features, and outlines the testing process carried out to ensure the system's functionality and reliability.

**Chapter III – Conclusion and Recommendation:**

This chapter summarizes the outcomes of the project and reflects on its success in solving the identified problem. It presents the overall conclusions derived from the development and deployment experience. In addition, it offers recommendations for future enhancements, such as introducing multi-vendor support, mobile app development, and more advanced features like product recommendations and customer reviews.

# CHAPTER II – SYSTEM DEVELOPMENT PROCESS

## 2.1 Analysis

### 2.1.1 Requirement Analysis

Requirement analysis involves identifying both functional and non-functional requirements of the system.

#### 2.1.1.1 **Functional Requirements:**

Functional requirements define **what the system should do** - the specific behaviors, functions, or features of the system. They describe how the system responds to particular inputs, how it processes data, and the outputs it should produce.

1. User registration and login with secure session management
2. View available gym services, trainer profiles, and class schedules
3. Book personal training sessions or group classes
4. Update user profile and track membership details
5. Admin login with access to a management dashboard
6. Admin functionalities: add/edit/delete members, assign trainers, and manage class schedules

#### 2.1.1.2 Non-Functional Requirements:

Non-functional requirements define **how the system performs** its functions. These are quality attributes that the system must have, such as performance, usability, security, and scalability.

1. Responsive UI for desktop and mobile
2. Fast loading time and optimized performance
3. Secure handling of user data and communication between client and server
4. Scalable backend for future growth
5. Easy maintenance and modular codebase

### 2.1.2 Feasibility Study

A feasibility study is an analysis of how successfully a project can be completed, accounting for factors that affect it such as economic, technological, legal, and scheduling factors. It shows how the system is associated with the business strategy. The categories within the feasibility study that need to be discussed are technical, economic, and operational feasibility.

#### 2.1.2.1 Technical Feasibility:

1. PHP and MySQL provide a reliable and widely supported backend environment for web application development
2. HTML, CSS, and JavaScript enable the creation of a responsive and interactive frontend

3. PHP-based frameworks and libraries allow for modular development and easier maintenance

#### 2.1.2.2 Economic Feasibility:

1. The project uses open-source technologies like PHP, MySQL, HTML, CSS, and JavaScript, which eliminates the need for costly software licenses
2. Minimal operational costs for local-scale deployments
3. Reduces long-term operational costs by minimizing paperwork, automating routine tasks, and improving staff efficiency
4. Provides long-term return on investment by improving service delivery, attracting more members, and increasing customer satisfaction

#### 2.1.2.3 Operational Feasibility:

1. Users and administrators can easily use the system with minimal training
2. Admin dashboard simplifies day-to-day operations such as managing member data, trainer assignments, and class schedules
3. Enhances customer experience by offering online accessibility, leading to improved member retention and satisfaction

### 2.1.3 Structured / Object-Oriented Modelling

In the object-oriented modelling of this project, we used UML (Unified Modeling Language) diagrams to represent the structure and behavior of the system. These diagrams help visualize how different parts of the application interact and contribute to fulfilling the system requirements. These models helped in understanding the functional flow, identifying classes, and designing the database schema.

Object-Oriented Modeling Tools Used:

1. **Use Case Diagram** – To show interactions between users (Customer, Admin) and system functionalities.
2. **Class Diagram** – To represent classes such as User, Member, Trainer, Schedule, Booking, and their relationships.
3. **Activity Diagram** – To visualize the flow of activities such as user registration, login, booking a fitness class and parallel actions.
4. **ER Diagram** – To represent the entities (such as Member, Trainer, Class, Booking, Schedules) and the relationships between them.

#### 2.1.3.1 Use Case Diagram

A use case diagram identifies the actors involved in an interaction and names the types of interactions (use cases) they have with the system. It represents the functional requirements of a system from the user's perspective, showing how external users

(actors) interact with various parts of the system. This diagram helps developers and stakeholders understand the expected behavior of the system without detailing the internal workings.

Actors:

1. **User**: Registers/logs in, Views fitness plans and schedules, Books fitness classes, Views and updates profile.
2. **Admin**: Adds/Edits/Deletes fitness plans and schedules.

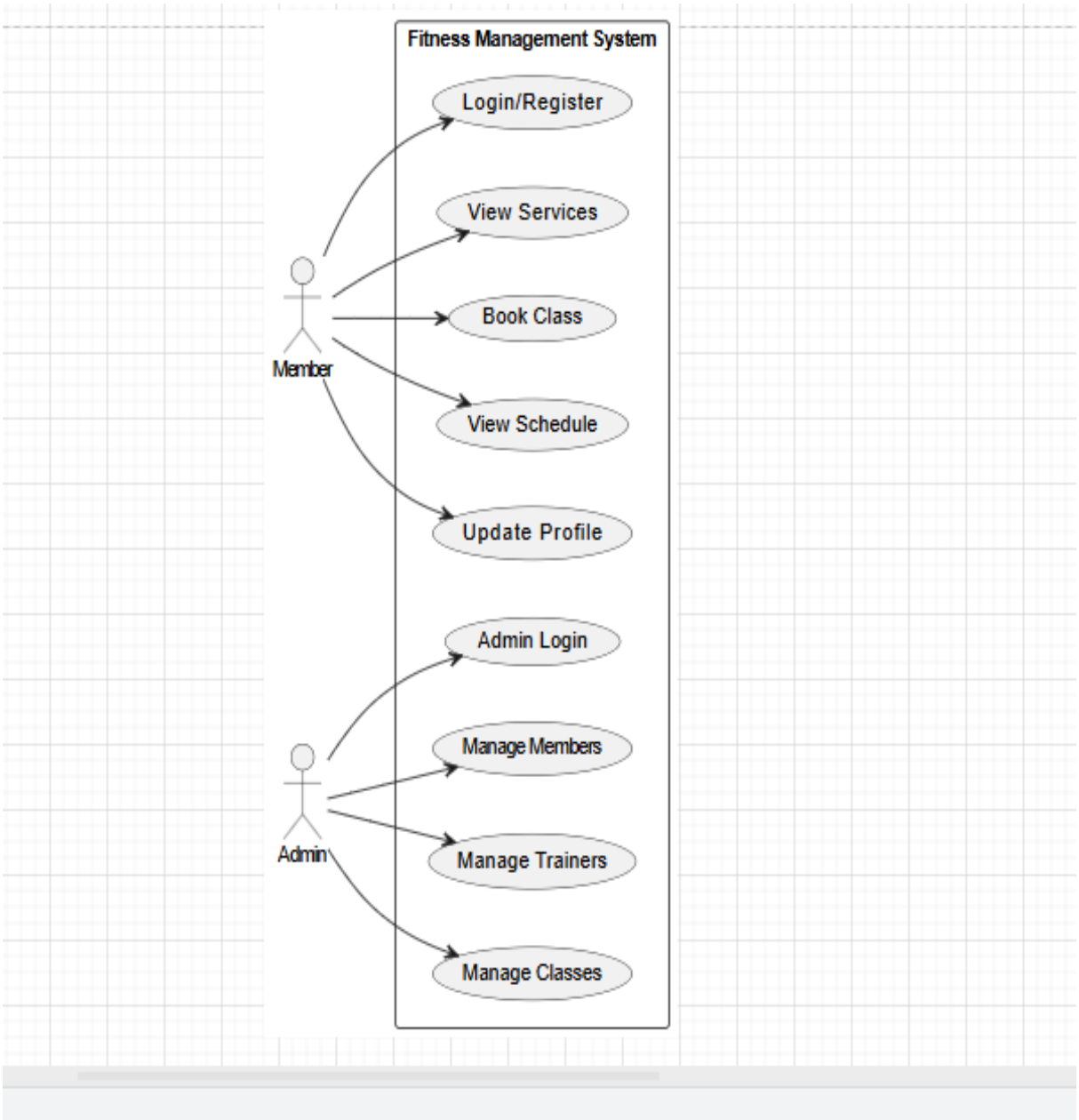



Fig 2.1: **Use Case Diagram**

### 2.1.3.2 Class Diagram

A class diagram is an illustration of the relationships and source code dependencies among classes in the Unified Modeling Language (UML). In this context, a class defines the methods and variables in an object, which is a specific entity in a program or the unit of code representing that entity.

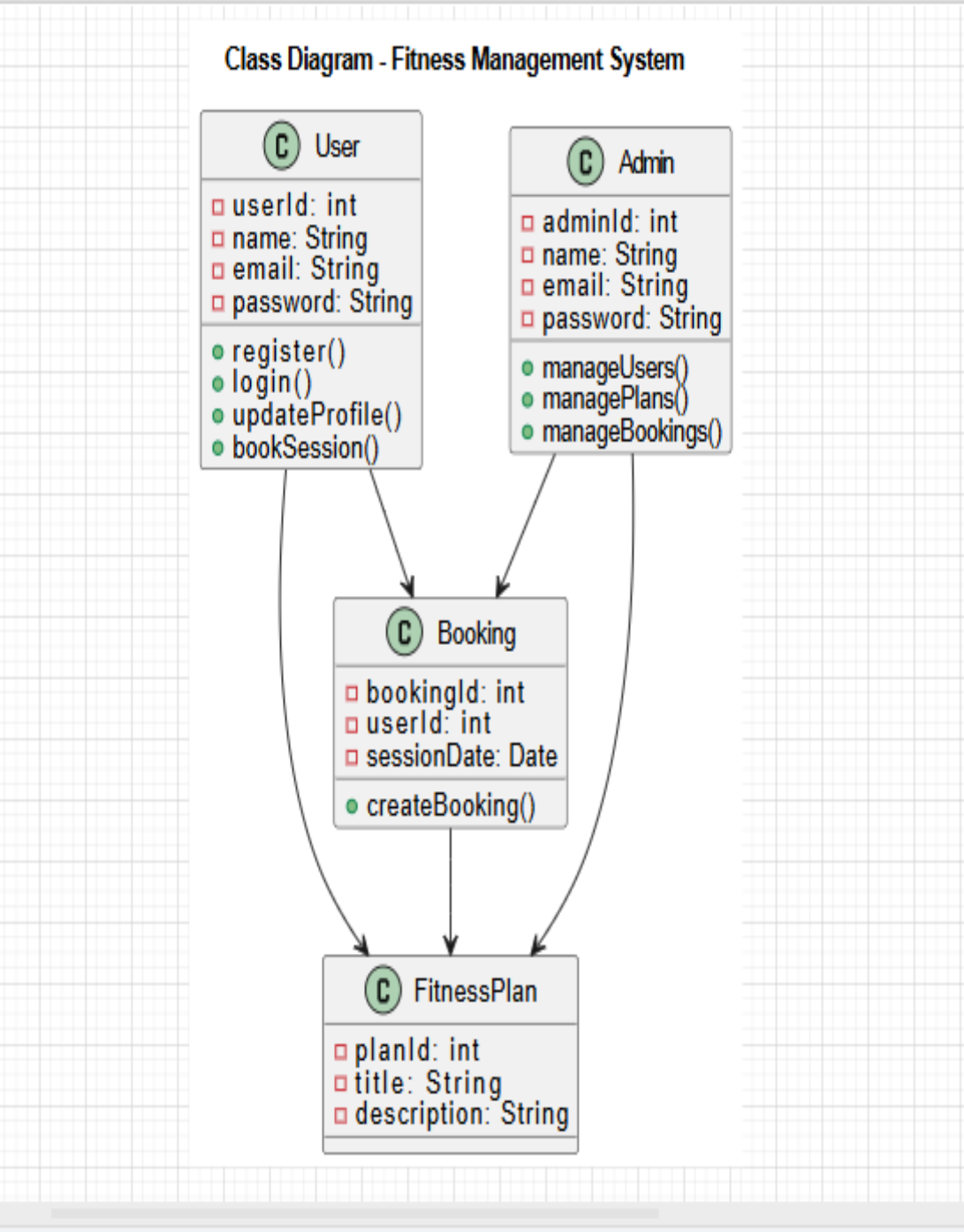



Fig 2.2: Class Diagram

### 2.1.3.3 Activity Diagram

An Activity Diagram is a type of UML (Unified Modeling Language) diagram used to represent the workflow or business process in a system. It focuses on the flow of control from one activity to another, showing both sequential and parallel behavior.

It is particularly useful for visualizing processes, such as placing an order, user registration, or managing a product catalog, from start to finish, including decisions, loops, and concurrent actions.

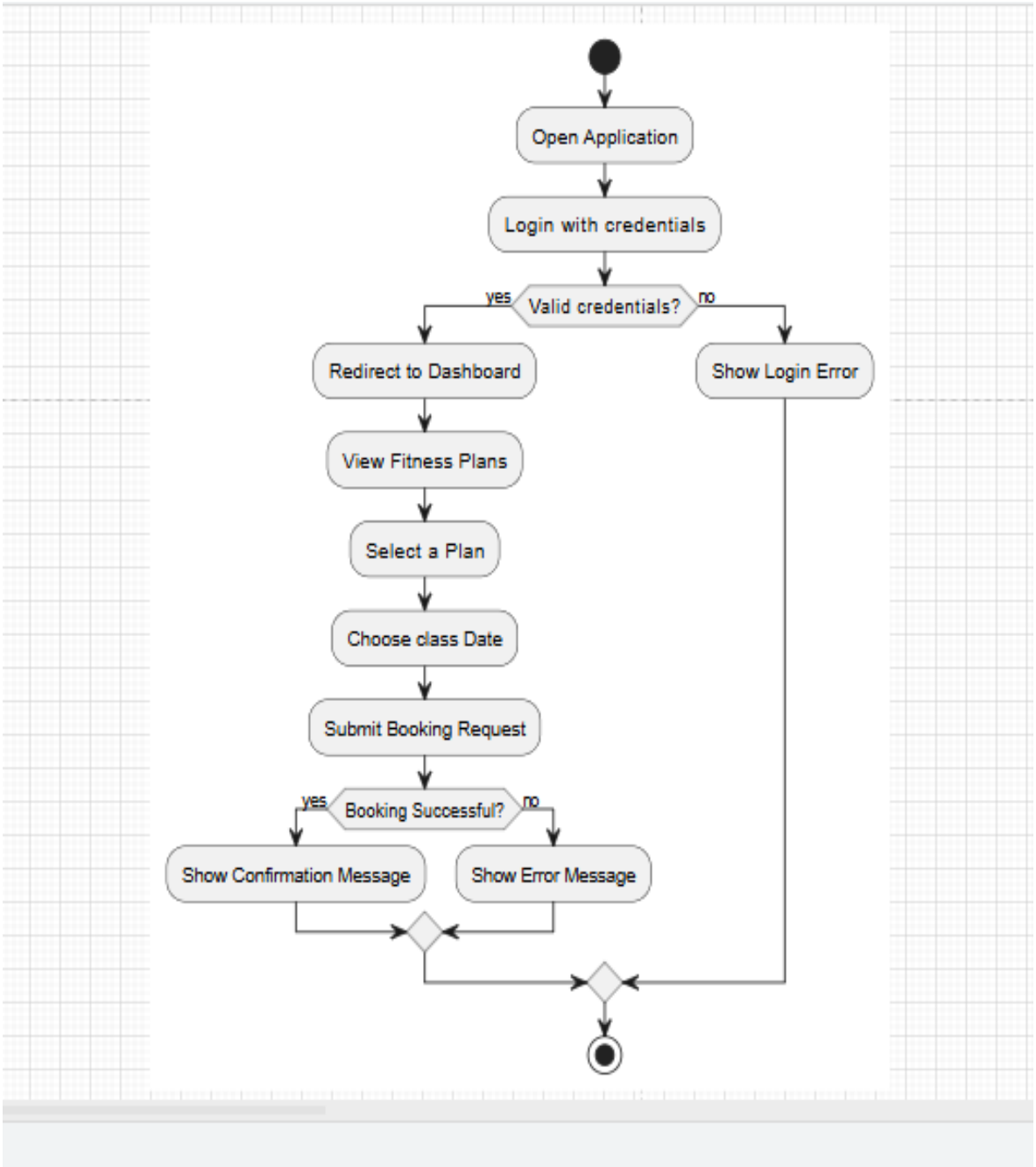



Fig 2.3: Activity Diagram

Table 2.1: Activity Diagram Table

| S.N. | Activity | Description | Decision Points | Result |
|---|---|---|---|---|
| 1 | Open Site | User launches the fitness management application. | _ | Site is opened |
| 2 | Log in with credentials? | User enters their username and password. | _ | Credentials submitted |
| 3 | Valid credentials? | System checks the entered credentials. | Yes/No | Proceed or show login error |
| 4 | View Plans | Browse fitness plans | _ | Pass |
| 5 | Redirect to Dashboard | If credentials are valid, user is redirected to the dashboard. | Yes | User reaches dashboard |
| 6 | View Fitness Plans | User explores available fitness plans | _ | Fitness plans displayed |
| 7 | Select a Plan | User selects a preferred fitness plan | _ | Plan selected |
| 8 | Submit Booking Request | User submits their booking request | _ | Booking request sent to system |
| 9 | Booking Successful? | System checks if booking is successful | Yes/No | Confirmation or error message shown. |
| 10 | Show Confirmation Message | If booking is successful. | Yes | User sees confirmation message. |
| 11 | Show Login Error | If credentials are invalid. | No | Error message is displayed. |

| | | | | |
|---|---|---|---|---|
| 12 | End Process | Ends the flow regardless of success or failure. | _ | Process ends |

### 2.1.3.4 ER Diagram

An Entity-Relationship Diagram (ERD) visually represents the entities, attributes, and relationships in the Fitness Management System, where admins manage users, classes, and schedules, and members book fitness sessions. It centralizes member and trainer data, links classes to schedules and trainers, tracks booking and payment activities, and manages workflow statuses (e.g., Active/Inactive, Paid/Unpaid).

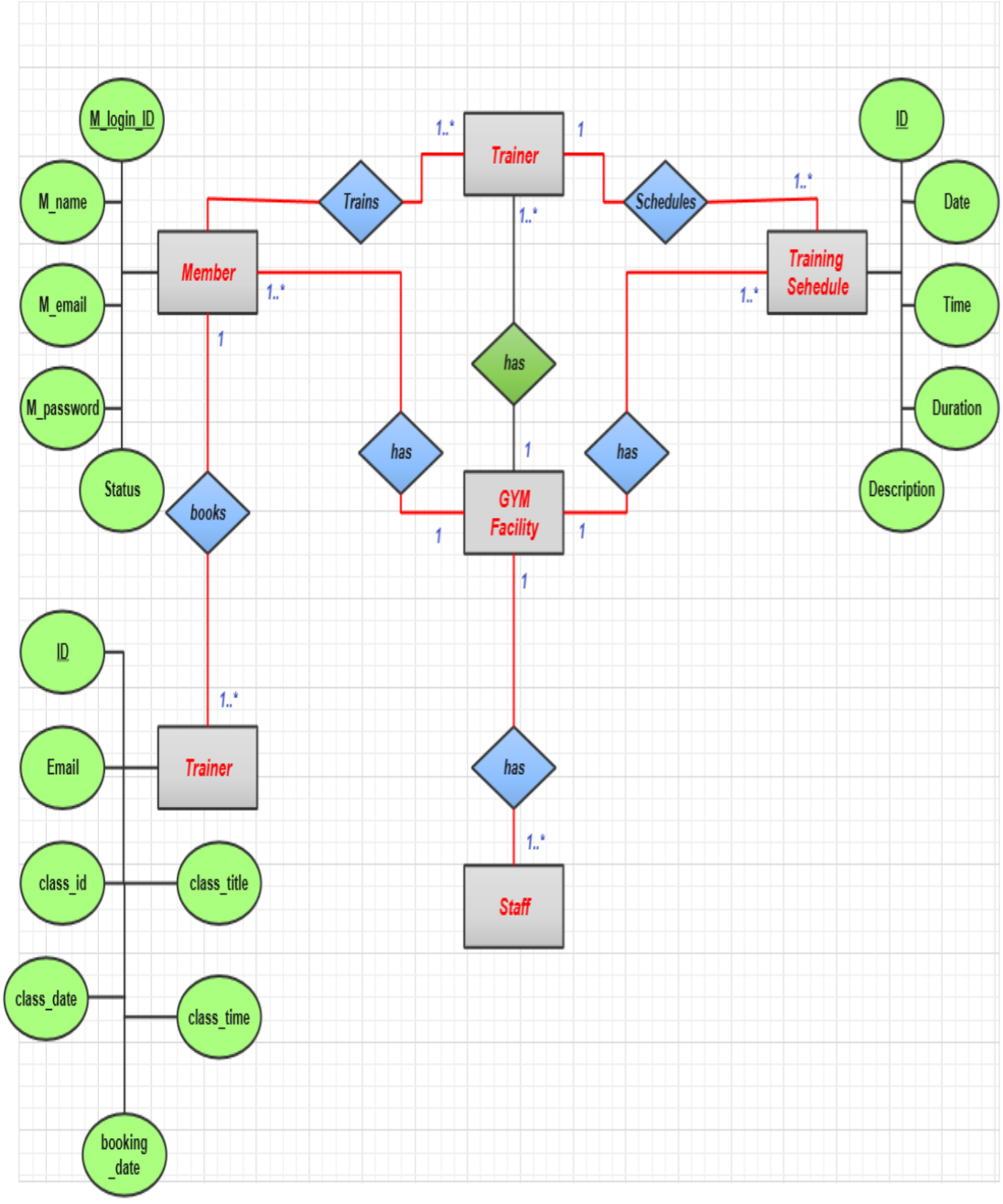



Fig 2.4: ER Diagram

## 2.2 Design

The design phase focuses on translating the functional and technical requirements of the system into an architectural and user-friendly model. This includes both **user interface (UI) design** for visual interactions and **database/object-oriented design** for backend data structure and system organization.

### 2.2.1 User Interface Design

The User Interface (UI) is a critical aspect of any platform. A good UI ensures intuitive navigation, fast access to products, and an efficient checkout process. The interface was designed with responsiveness and usability in mind, ensuring compatibility across various devices including desktops, tablets, and smartphones.

**Key UI Components:**

1. **Homepage:** Presents an overview of the fitness club, featured fitness plans, promotional banners, and quick access to login/register.
2. **Fitness Plan Listing Page:** A clean grid layout showing available workout plans with filters based on duration or category.
3. **Plan Detail Page:** Includes detailed plan information such as description, duration, goals, and signup options.
4. **Booking Class:** Allows users to select a preferred date and time for fitness sessions and confirm bookings.
5. **Login/Register Page:** Secure authentication forms with validation.
6. **Admin Dashboard:**

    - User Management (add/edit/delete)
    - Schedule Management (view/approve/add/delete)

**Tools Used:**

1. **HTML/CSS/JavaScript:** For basic frontend structure and interactivity.
2. **Bootstrap:** for responsive and utility-first styling.

### 2.2.2 Database Design / Object-Oriented Design Models

The backend of the **Fitness Management System for Grande Fitness** is powered by **MySQL**, a relational database that stores data in structured tables with predefined relationships. The database schema is designed to represent real-world entities such as users, services, and class bookings. Each entity is carefully modeled to support the core functionalities of the system like user registration, booking, and admin management.

Database Collections:

1. **Users:**
    - Name, Email, Password (hashed), Booking Type, Date
2. **Booking:**
    - Name, Booking id, Email, Type, Address, Date
3. **Schedule:**
    - Classes, Start Date/Time, End Date/Time Amount, Address

Object-Oriented Design Overview:

The system follows modular, object-oriented patterns for better maintainability and scalability. Each major component is encapsulated in separate PHP classes (organized as models, controllers, and views), ensuring a clean separation of concerns and easy future upgrades.

**Classes / Entities:**

1. User: Handles user registration, login authentication, profile updates, and booking operations.
2. Fitness Plan: Manages all CRUD operations for fitness plans, including details such as title, duration, and pricing.
3. Booking: Records session bookings made by users and tracks the status (e.g., confirmed, canceled).
4. Admin: (privileged role) Manages users, fitness plans, and bookings from the admin dashboard. Has control over all key operations.

**Relationships:**

1. One **User** can place multiple **Bookings**
2. One **Booking** is associated with one **User** and one **Fitness Plan**
3. One **Fitness Plan** can be booked by many **Users**
4. **Admin** actions span across all entities (Users, Fitness Plans, and Bookings)

## 2.3 Implementation

Implementation refers to the phase where the actual system is built, deployed, and made functional based on the design specifications. It involves writing PHP source code, designing database schemas in MySQL, integrating user interfaces, and configuring the environment to ensure all planned features function as expected.

In this project, implementation was carried out using **PHP** for server-side scripting and **MySQL** for relational data storage. The frontend was built using **HTML**, **CSS**, and **JavaScript**, with Bootstrap for responsive design. The integration between the frontend

and backend was achieved using form submissions, sessions, and server-side validations.

Each module—such as user registration, fitness plan display, session booking, and admin management—was developed individually and tested before integration. The system is deployed on a local development environment using **XAMPP**, and it supports essential features such as secure authentication, real-time booking, and data management via an admin dashboard.

### 2.3.1 Tools and Technologies Used

This project was developed using **PHP** and **MySQL**, enabling robust server-side scripting and structured data management. The frontend is built using standard web technologies, with a focus on responsiveness and usability. Below are the main tools and technologies used:

Table 2.2: Tools and Technologies Used

| **Tool/Technology** | **Purpose** |
|---|---|
| **PHP** | Server-side scripting language used to implement core backend logic and database interaction |
| **MySQL** | Relational database system used to store and manage user data, bookings, schedules, and fitness plans |
| **HTML/CSS** | For creating the structure and visual layout of the website |
| **JavaScript** | For client-side interactivity and dynamic UI behavior |
| **Bootstrap/Tailwind** | CSS framework used for responsive and mobile-friendly design |
| **XAMPP** | Local server stack for running PHP and MySQL during development |
| **phpMyAdmin** | Web-based interface to manage the MySQL database visually |
| **Git/GitHub** | Version control and collaboration tool for managing code history |

### 2.3.2 Module Description

The project consists of the following core modules:

#### 2.3.2.1 User Module

- **Features:**
  - User registration and login
  - Secure authentication with session management
  - View and update profile
  - Book fitness plans and view booking history

#### 2.3.2.2 Services Module

- **Features:**
  - Browse available fitness plans by category (e.g., Yoga, Cardio, Strength)
  - View detailed information such as description, duration, and pricing
  - Filter plans by type or duration
  - Select a plan for booking

#### 2.3.2.3 Booking Module

- **Features:**
  - Book a session with a selected fitness plan
  - View, cancel, or reschedule bookings
  - View booking calendar

#### 2.3.2.4 Admin Module

- **Features:**
  - Admin login with role-based access
  - Add, edit, or delete fitness plans
  - Manage user information and bookings
  - Approve, cancel, or update booking statuses

### 2.3.3 Testing

Testing was conducted at multiple stages to ensure the system worked correctly and met the requirements.

#### 2.3.3.1 Unit Testing

Unit testing focuses on verifying the smallest testable parts of the application, such as PHP functions, form validation scripts, and database interaction methods, in isolation. These tests are typically written and executed by developers to ensure that individual components behave as expected under various input scenarios.

In this project, unit tests were conducted on core functionalities such as **user authentication**, **fitness plan management**, and **session booking operations**. By isolating and testing these units individually, potential issues were identified and resolved early in the development cycle, improving the accuracy and robustness of the system.

**Key areas tested during unit testing include:**

1. **User Login Validation:** Verifying correct and incorrect login credentials against the database.
2. **Form Input Validation:** Ensuring required fields are filled, email formats are correct, and password confirmation matches.
3. **Booking Logic:** Checking that booking data is correctly saved in the database and associated with the right user and fitness plan.
4. **Admin CRUD Operations:** Testing add/edit/delete functionalities for fitness plans and verifying changes in the database.

This testing phase ensured each logical unit of the application performed reliably, paving the way for successful integration and system-wide testing.

Table 2.3: Test Case

| S.N. | Functionality | Scenario | Descriptions | Result |
|---|---|---|---|---|
| 1 | Launch website | Homepage Opens | User opens browser, enters system URL, and homepage loads successfully | Pass |
| 2 | User Registration | New user signs up | User fills out registration form with required details and submits | Pass |
| 3 | Login | User logs into the system | User enters valid credentials and gains access to their dashboard. | Pass |
| 4 | View Plans | Browse fitness plans | User navigates to plan listing and views all available programs | Pass |
| 5 | Book Session | Book a fitness class | User selects a plan and date, confirms booking, and booking is saved | Pass |

| | | | | |
|---|---|---|---|---|
| 6 | Admin Login | Admin access dashboard | Admin logs in using separate credentials and accesses admin panel | Pass |
| 7 | Add Plan (Admin) | Admin creates a new plan | Admin fills form to add a new fitness plan and it appears in listings | Pass |
| 8 | Cancel Booking | User cancels a session | User cancels an already booked session and status updates in database | Pass |
| 9 | Logout | End user session | User clicks logout and session ends with redirect to homepage | Pass |

# CHAPTER III: CONCLUSIONS AND RECOMMENDATION

## 3.1 Summary

This project was developed to address the operational challenges faced by fitness centers like Grande Fitness by creating a web-based fitness management system. The system was designed and implemented using **PHP** for backend scripting and **MySQL** as the database solution to ensure data integrity, scalability, and ease of maintenance. It features a responsive front-end where users can register, view fitness plans, and book sessions conveniently.

For administrators, the system offers a secure dashboard to manage user information, create and edit fitness plans, and oversee booking records. Each module was developed following modular and object-oriented principles to ensure long-term maintainability.

The system is hosted locally using XAMPP during development. The development process followed a structured approach, emphasizing progressive implementation, regular testing, and user feedback to ensure the platform fulfills both functional and non-functional requirements of the fitness center.

## 3.2 Conclusion

The **Fitness Management System for Grande Fitness** has successfully met its primary goal of digitizing gym operations by providing an efficient and user-friendly web-based platform. The system includes:

1. A streamlined registration and login process for members
2. Easy access to browse and book fitness plans
3. A secure admin panel for managing users, plans, and bookings
4. Organized data storage using MySQL for reliable performance
5. A modular PHP backend architecture that enables future feature enhancements

By eliminating manual records and replacing them with digital processes, the platform significantly improves operational efficiency, reduces errors, and enhances the overall member experience. For the fitness center, this system fulfills the need for a maintainable, scalable, and customizable solution to manage schedules, users, and fitness programs from a centralized interface.

Looking ahead, the platform offers flexibility for integrating features like payment gateways (e.g., eSewa), attendance tracking, and progress monitoring—ensuring long-term usability and relevance as the organization grows.

## 3.3 Recommendation

While the system successfully meets its core objectives, the following improvements and enhancements are recommended for future iterations to further increase usability, flexibility, and scalability:

1. **Payment Gateway Integration:**
   Incorporate multiple payment options such as **Khalti**, **FonePay**, and **PayPal** to provide users with convenient and secure online payment methods.
2. **Mobile Application Development:**
   Create dedicated **Android** and **iOS** applications to enhance accessibility and deliver a seamless mobile experience for users on the go.
3. **Session Notification and Reminders:**
   Implement automated **email/SMS alerts** to notify users about upcoming sessions, booking confirmations, or cancellations.
4. **Progress Tracking and Reports:**
   Allow users and admins to view and record fitness progress over time through **dashboards and visual charts**.
5. **Rating and Feedback System:**
   Enable users to provide **reviews and ratings** on fitness plans or sessions, helping to build credibility and improve service quality.
6. **Admin Role Separation:**
   Introduce **multi-level admin roles** (e.g., Manager, Trainer, Receptionist) to distribute responsibilities across staff and ensure better operational control.
7. **SEO Optimization**: To improve visibility and attract more traffic to the site, optimizing the platform for search engines by using proper **SEO techniques** (like metadata, alt tags, etc.) would be beneficial.

# REFERENCES


Bhatta, R. (2019). *Impact of digital systems on operational efficiency in Kathmandu-based fitness centers*. *Journal of Information Systems in Nepal, 6*(1), 55–62.

Choudhury, S., Das, A., & Roy, T. (2020). *Digital personalization and client retention in fitness services: A data-driven approach*. *International Journal of Health Informatics, 12*(3), 44–51. https://doi.org/10.1016/j.ijhi.2020.03.005

Glofox. (2021). *Glofox: Gym and studio management software*. https://www.glofox.com/

GitHub. (2023). *Gym management system in PHP/MySQL [Repository]*. https://github.com/search?q=gym+management+system+php

K.C., S., & Maharjan, A. (2021). *Implementation of web-based tools in Nepalese fitness centers*. *Nepal Journal of Technology and Society, 4*(2), 20–28.

Rao, K., & Sharma, P. (2018). *Centralized management systems for fitness clubs: A comparative study*. *Asian Journal of Management Studies, 7*(4), 61–67.

Sharma, N., & Karki, B. (2022). *Adoption of fitness management systems in Nepal: Challenges and opportunities*. *Journal of Information and Communication Technology, 10*(2), 88–95.

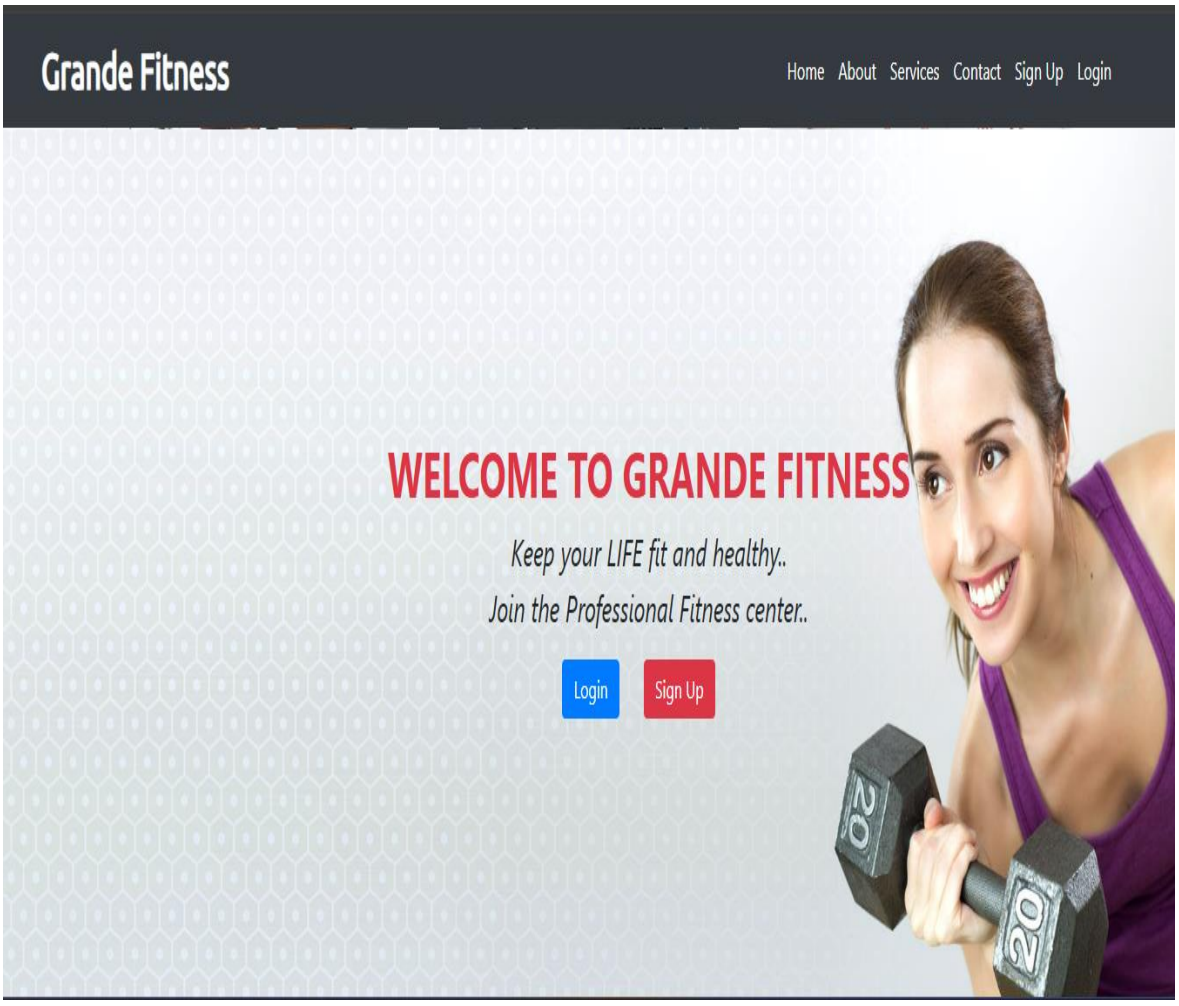
Singh, M. (2020). *Procedural PHP and MySQL in small-scale gym automation*. *International Journal of Computer Applications, 176*(13), 30–34. https://doi.org/10.5120/ijca2020919967

Stack Overflow. (2024). *PHP and MySQL discussions on gym management systems*. https://stackoverflow.com/

# APPENDICE

## Appendix A: System Screenshots

- User Interface: Home page, Service Page, Contact Page, Login and Sign Up page
- Admin Dashboard: Product Management, Order View



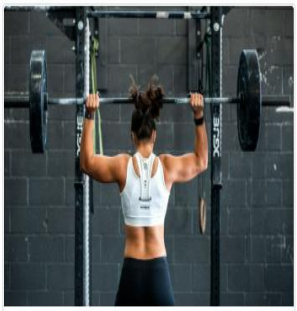

Appendix 1: Homepage

# Our Services

**YOGA CLASSES**

Will have expericed trainners to help you with your yoga...

Price: ~~₹ 2000~~ ₹ 1500 Book now



**WEIGHT TRAINING**

From body building to powerlifting, and everything in between...

Price: ~~₹ 2000~~ ₹ 1200 Book now

**ZUMBA**

Join zumba lessons at profitness gym...

Price: ~~₹ 1000~~ ₹ 700 Book now

**CARDIO CLASSES**

Helps strengthen the heart and lungs Join our cardio class today...

Price: ~~₹ 9000~~ ₹ 6500 Book now

**GROUP TRAINING**

Stay motivited and exercise with friends Join our group exercies today...

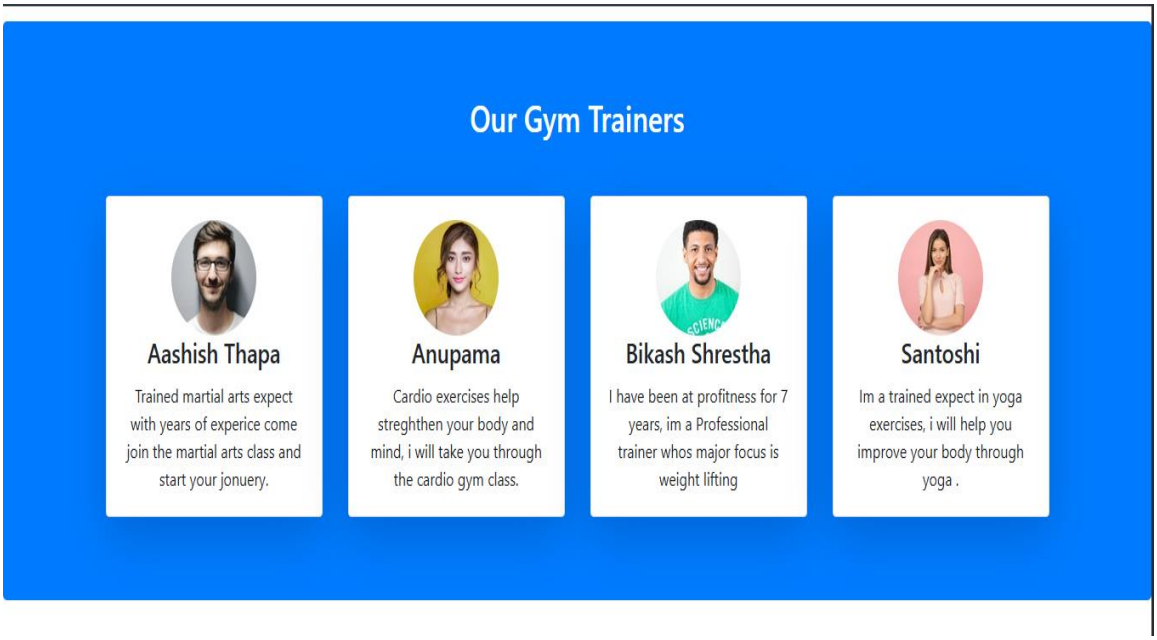
Price: ~~₹ 6000~~ ₹ 5700 Book now

**ENDURANCE TRAINING**

Build your stamina with us today Join endurance training today classes...

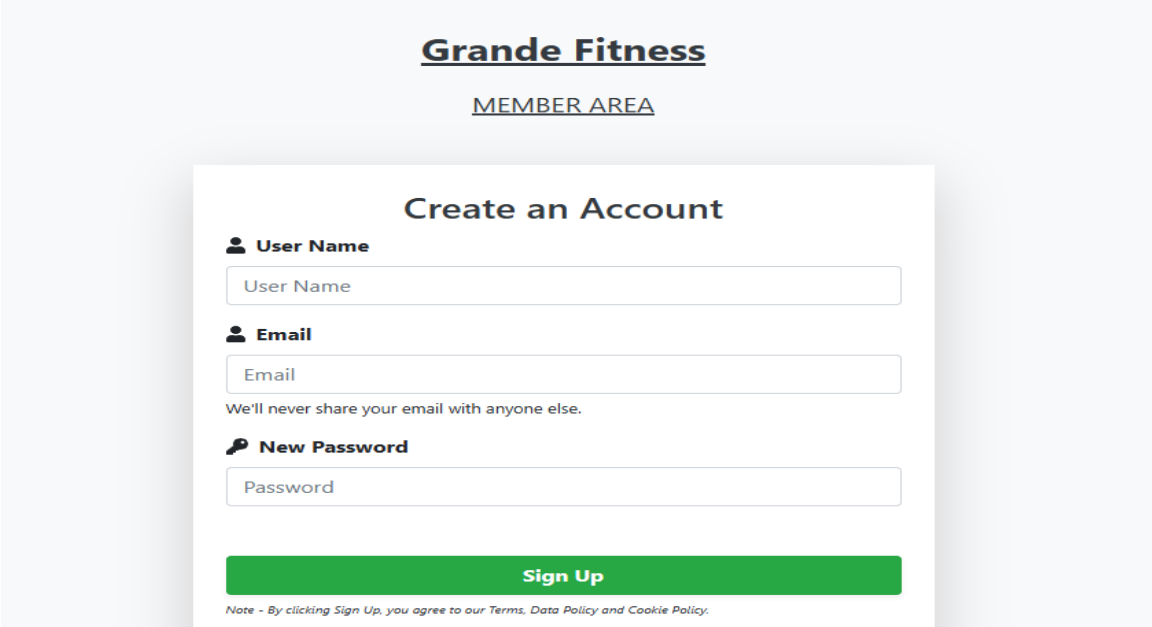
Price: ~~₹ 4000~~ ₹ 2200 Book now

Appendix 2: Services Page

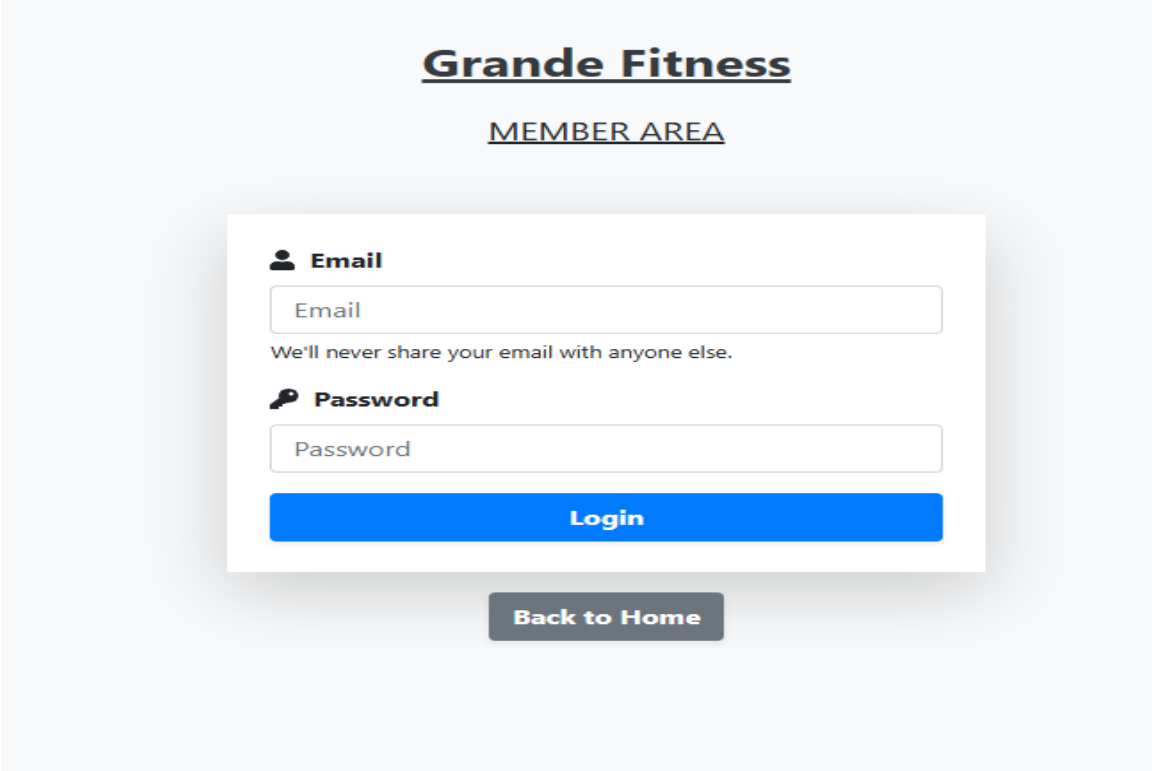



Appendix 3: Trainer


Appendix 4: Contact Page

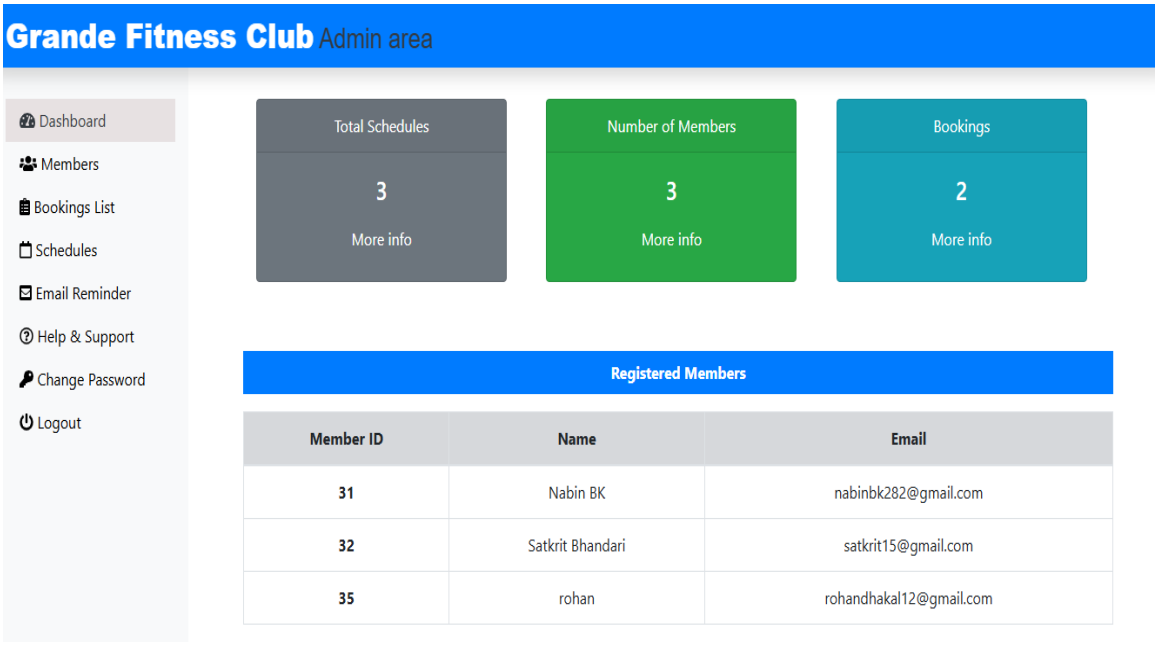



Appendix 5: Sign Up page

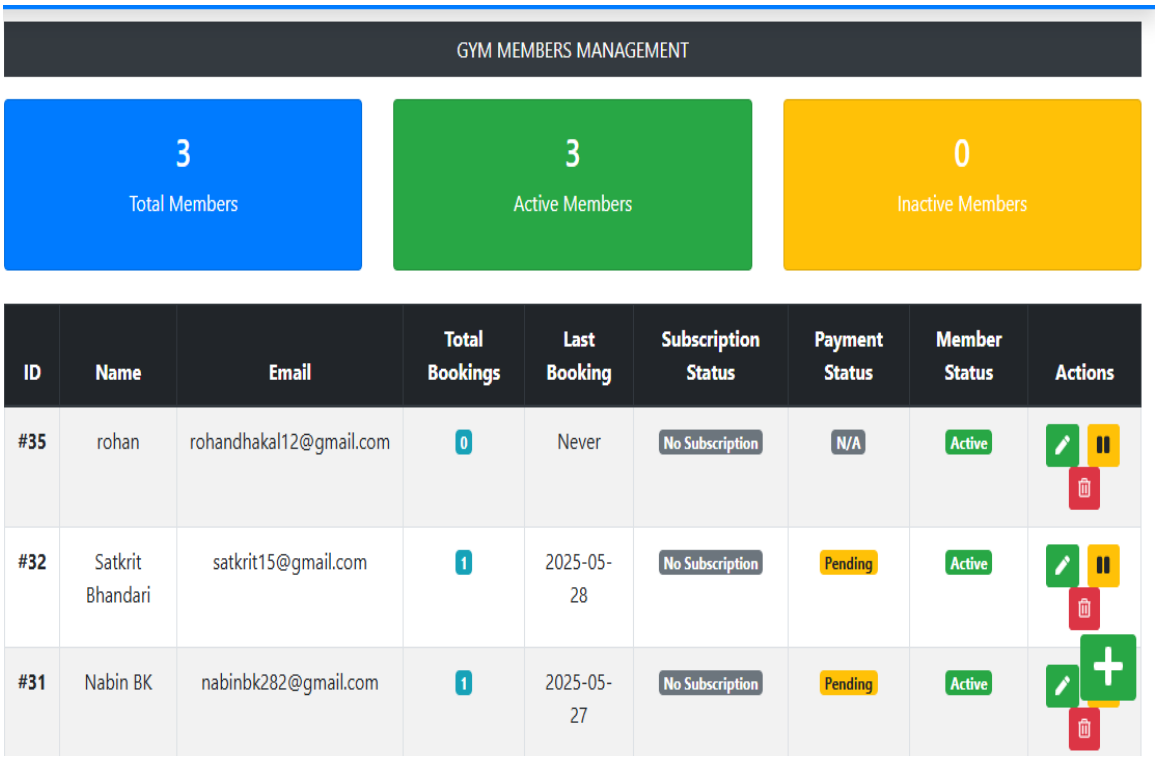



Appendix 6: Login Page

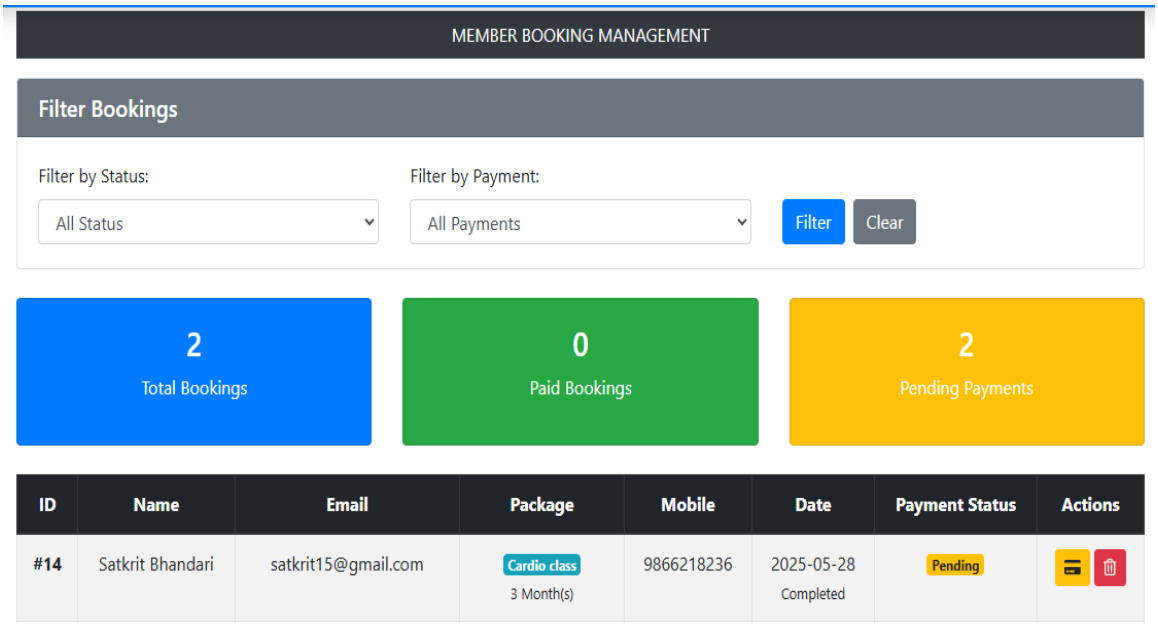
**Admin Part:**



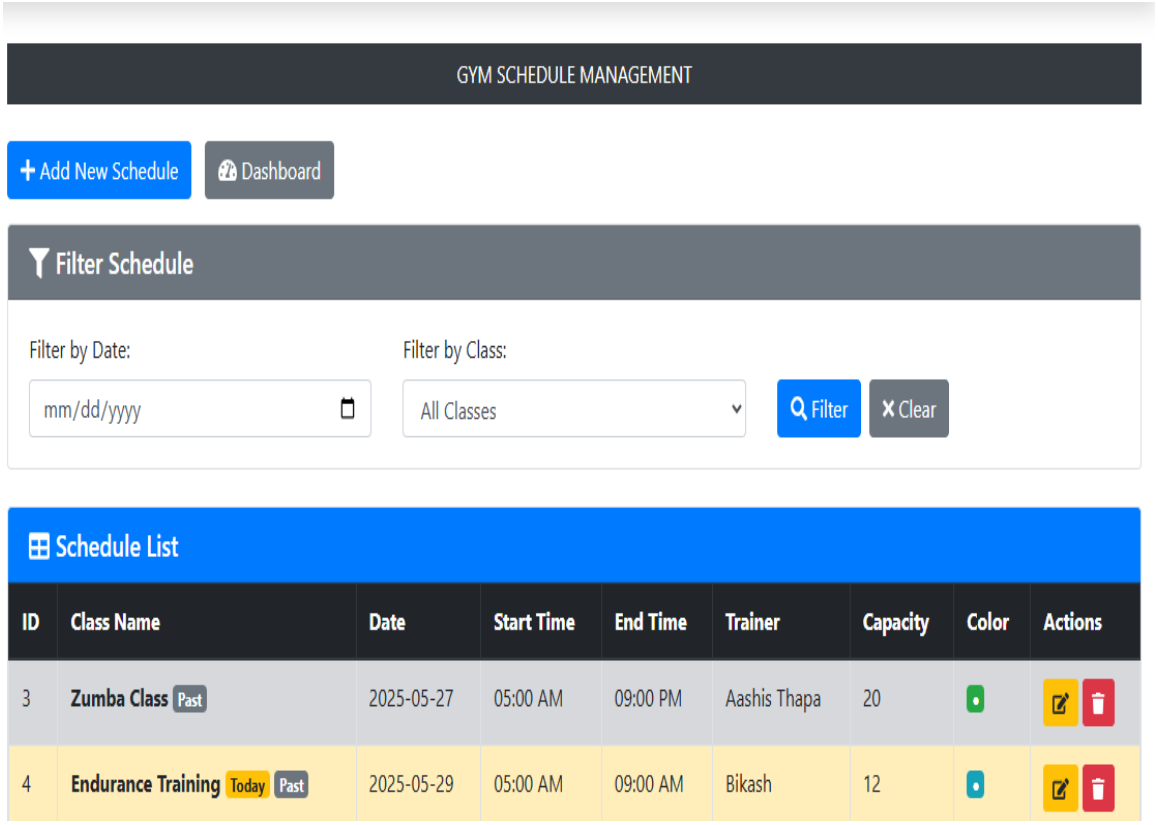

Appendix 7: Admin Dashboard




Appendix 8: Gym Member




Appendix 9: Booking View




Appendix 10: Schedule Management