Functional and Non-Functional Requirements

# These should describe all the ****actions and features**** our Gym Management System provides

# User Registration & Login

* Members must be able to create an account with personal details.
* Secure login with username/email and password.

# Membership Management

* Ability to subscribe to weekly, monthly, or annual plans.
* Option to upgrade, downgrade, or cancel subscriptions.

# Service Management

* Add/remove optional services (personal training, diet plan, etc.).
* Allow members to book or cancel classes.

# Payment & Billing

* Process payments (cash, card, or online).
* Generate and store payment receipts.
* Show billing history to members and staffs.

# Class & Schedule Management

* Manage available gym classes, trainers, and time slots.
* Allow staff to manage schedules and assign trainers.

# Reports & Analytics

* Generate revenue reports.
* Track attendance and member activity.

# Feedback & Communication

* Members can give feedback or rate Staff(trainers).
* Staff can send updates or announcements.

# Notification System

* Email/SMS/app notifications for payment reminders, class schedules, or gym announcements.

Non-Functional Requirements

**These describe system qualities like performance, usability, and security**

# Performance

* The system must support at least 500+ concurrent users.
* All queries should return results within 2 seconds.

# Security

* Passwords must be encrypted (e.g., SHA-256).
* Secure login with session timeouts.
* Role-based access (admins vs members).

# Availability & Reliability

* System uptime should be at least 99%.
* Automatic backup of database daily.

# Usability

* Simple and user-friendly interface.
* Accessible on desktop and mobile devices.

# Scalability

* The system should be able to expand to support multiple gyms/branches in the future.

# Portability

* The system should work on different operating systems (Windows, Linux, Mac).

# ****Localization****

* Support multiple languages and currency formats