Year 2 Semester 2 2025

IT Project

GYM Management System

(ZERO Xcuses)

Information Technology Project

IT2080

Group ID:

ITP25_B2_W225

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Group Number : ITP25_B2_W225

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Problem Statement

ZERO Xcuses gym continues to rely on manual record keeping and manual management strategies leading to inefficiency in day-to-day business functions. Without proper system for member, membership, shift, attendance, payment and scheduling management, all members and involved stakeholders experience delays, miscommunication and booking conflicts leading to reduced satisfaction.

This project aims to solve these inefficiencies by providing a comprehensive digital solution to automate and manage member, membership, resource reservation, staff, shifts, attendance and payment processes.

Users Involved

- **Member** – A person who uses the gym. They can register, book classes, check their schedule, and make payments.
- **Staff** – Workers at the gym. They help members, update schedules, and manage daily tasks.
- **Manager** – The person in charge of the gym. They manage staff, check reports, and make important decisions

Users of the product and the Benefits

Member

- Can register and manage profile online.
- Buy membership, view membership status and renew membership status online.
- Get booking confirmations and expiry early notifications automatically.
- Book and reserve resources and manage them online.
- Check in using RFID/QR or manually.
- Pay online using credit or debit card.
- Can apply discounts and coupons.
- Receive payment receipts.

Staff

- Can register, manage member profiles and mark member attendance.
- View member information and membership details.
- Can view assigned shifts and request shift changes or apply for leave.
- Can manage reservations and bookings.
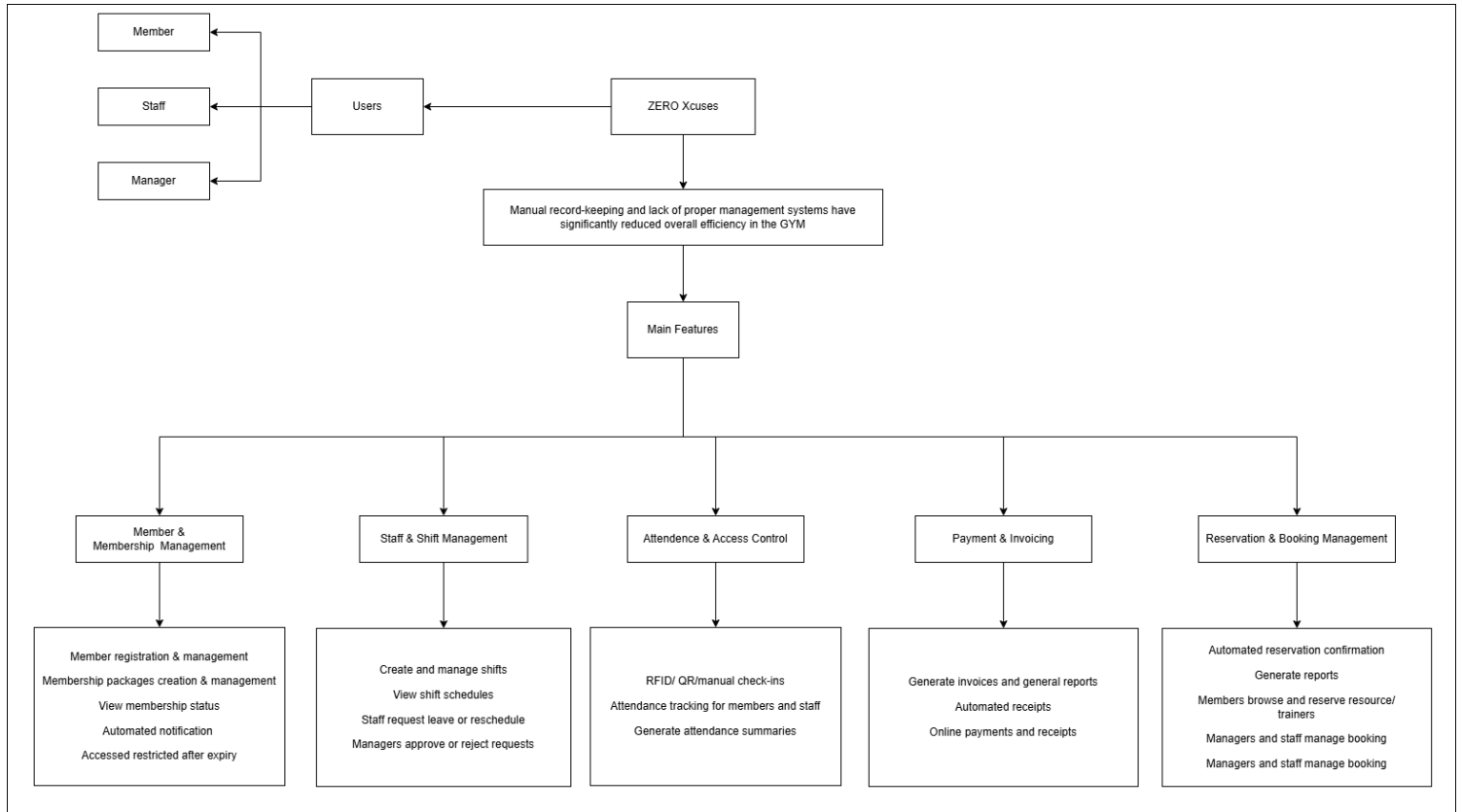- Can generate invoices.

Manager

- Can create and manage membership plans.
- Can register and manage staff and member accounts.
- Can manage reservations and booking of gym resources.
- Can view attendance data to make business decisions and security decisions.
- Can assign and manage staff shifts.

Key Features

- Member & Membership Management
- Staff & Shift Management
- Attendance & Access Control
- Payment & Invoicing
- Reservation & Booking Management

Mind Map

Member

Staff

Manager

Users

ZERO Xcuses

Manual record-keeping and lack of proper management systems have significantly reduced overall efficiency in the GYM

Main Features

Member & Membership Management

Member registration & management

Membership packages creation & management

View membership status

Automated notification

Accessed restricted after expiry

Staff & Shift Management

Create and manage shifts

View shift schedules

Staff request leave or reschedule

Managers approve or reject requests

Attendence & Access Control

RFID/ QR/manual check-ins

Attendance tracking for members and staff

Generate attendance summaries

Payment & Invoicing

Generate invoices and general reports

Automated receipts

Online payments and receipts

Reservation & Booking Management

Automated reservation confirmation

Generate reports

Members browse and reserve resource/ trainers

Managers and staff manage booking

Managers and staff manage booking

User Requirements

- Members can register, log-in and manage their profiles.
- Gym Staff and Mangers can register members and manage the profiles.
- Members can view available membership packages, check membership status and buy memberships.
- Managers can create, update, activate and deactivate membership plans.
- Memberships has a expiry date.
- Members access will be restricted after expiring the membership.
- Managers can generate member reports and summaries.
- Members can browse available resources (e.g., trainers / boxing ring).
- Members can make, reschedule, or cancel bookings.
- System make sure there is no conflicts in booking like double booking or over booking.
- Managers and Staff can receive resource (trainers / boxing ring) reservations in their dashboard and manage them.
- Managers can generate reservation reports and summaries.
- Managers can create, edit and manage staff shifts.
- Staff can view shifts schedules.
- Staff can request to reschedule shift or apply for leave.
- Managers can approve/deny leaves requests.
- Managers can generate staff shift reports and summaries.
- Members can check in using RFID/QR or manually.
- Attendance data is logged in real-time and stored.
- Staff can mark member attendance manually if needed.
- Managers can view the attendance details.
- Managers can generate attendance reports and summaries.
- Members can pay for membership packages online via a secured payment gateway.
- Members can pay online via credit card or debit card.
- Members can apply discount codes and promo offers.
- Members can receive automated receipts.
- Managers and Staff can generate invoices.
- Managers can generate financial reports and summaries.

Project Name :- ZERO Xcuses