

# **Title**                      **Gym Management System**

## **Introduction** (aim or motivation)

The purpose or objective of this system is to digitalize and create an automated system. The system will perform the task like adding the new member to the gym, removing the member, or keeping the other stuff required in managing the gym properly. It will be easy for admin to manage the GYM.

## **Background** (research and project selection)

The project is selected after several discussions. There were many projects we could select, but we chose the gym management system. We researched that the **existing system** in gyms is using paperwork to manage the gym system. This creates problems, in terms of member records, which minimize the overall performance of the system and do not fulfill the requirements. Thus, the work becomes increase.

### **Disadvantages of the Existing Systems**

- Data Security is very difficult
- Difficulty to gather information files.
- Manual Searching and managing records are difficult.
- Admin cannot maintain records efficiently.
- Chances of errors are high.

### **Proposed system**

Gym Management System provides a computer-based management system for keeping all records about Members. Our Gym Management System is the best option for it. It reduces and removes the manual and traditional workload. User can easily add/ delete/ update/view each record on the computer.

## **Project Specification**

In this project, we have used features of user or admin such as;

The system user is Admin.

Members include new members, staff, and coaches.

Admin can add, view, search, edit and delete the records of members.

Some functions such as gotoxy, coord, have been used that places the cursor at the desired position on the screen.

## Problem Analysis

In the proposed system, the problems are to enter the password, after going into the main menu. Any option can be chosen i.e., to change the records of the members. To save the records of the members systematically, some functions are used to breakdown the problems. For example, to add the records of the members we have to write the ID, name, contact, member since, address of the members. If the ID of the person already exists then the system will say that it already exists. Then, we again go to the main menu of the system. The same process is for other functions Such as search, view, edit, and delete the records of the members.

## Solution Design (project detail, functionality, and features)

The features or functions which are used are following.

1. Some libraries are used which are `STDIO`, `WINDOWS`, `CONIO`, `STDLIB`, and `STRING`
2. `COORD` `#include <windows.h>` is the header file in which it is defined

A **COORD** structure that specifies the new cursor position, in characters.

**GOTOXY**: gotoxy function places the cursor at the desired location on the screen i.e., we can change the cursor position using gotoxy function.

3. Struct staff;

ID, name, contact, address, member since, category of staff.

4. Add staff;

For adding the members, we select the category of the staff i.e., New member, Coach, or Staff.

For that, we write the ID, name, contact, address, and date of joining or member since of the member.

5. View staff

The details of members will be shown such as their id, name, contact, address, and member since.

6. Search staff

Admin can search the staff by

I) searching by id, (ii) searching by name.

Then details of members will be shown such as its id, name, contact, address, and member since.

7. Edit staff

The staff can also be edited by entering the ID of the member which is to be edited. Then, its name, address, contact, member since will be edited. And if already exists programs will take the admin to the main menu.

#### 8. main menu

In this admin see the options he can do if with the records of the members. Such as add, view, search, edit, delete the members.

#### 9. return func

By this function *Press enter to return to the main menu* will be shown below the screen. It is called in almost all functions.

#### 10. get data

In this admin can add, view the data of members. Firstly, Admin enters the ID of members then he can type the records of the members Such as their name, address, contact, and member since.

#### 11. check id

In this function, the ID of the member will be checked. As the admin enters the ID of the member then firstly it will be checked either the member already exists or not. If not then, the admin can do further processes. It is also called in many functions.

#### 12. Password

The password is already written in this function. Admin will enter the password if the password matches that. Then, he can proceed into the main menu. Otherwise, cannot proceed

#### 13. FILE

Files are used i.e., fp, ft, fs. The file which has saved the records or the details of the members can be the view, edited, and deleted by the admin.

## Implementation and Testing

The functions are implemented to run the code successfully. First of all, the **main** is called then if a password is correctly entered then the main menu will be shown on the screen, otherwise again enter the password. In the main menu, the admin can choose to add, view, search, delete, and edit the records of the members. Then after doing so admin can choose to close the application or the program. The functions add, delete, view, search, and edit the records of the members are also implemented and successfully tested. All the records of the members are saved in the file.

## **Project Breakdown Structure** (workload distribution with timeline)

The project has been breakdown into parts. The functions were distributed. 1<sup>st</sup> person has done Introductions of the system i.e., Password, main menu, closing application. 2<sup>nd</sup> person has done the add, view, edit, and search the members' functions. 3<sup>rd</sup> person has done getdata, checkid, and delete the members functions. Each person has performed the functions in a good manner.

## **Results**

After logging into the account, the main menu will be shown in which the ADMIN can add, view, edit, search, and delete the records of the members. After doing so Admin can Close the application. The records will become safe in the file. It will be easy for admin to again view the records of the members by reading though the file.

## **Conclusion** (summary and discussion)

It will be easy for admin to manage the GYM. Admin can easily add/ delete/ search/view/edit each record on the computer. The functions that are defined and called helps the admin to get the desired results.