



**North South University**  
Department of Electrical and Computer Engineering

**Lab Project Report**

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Course Code	:	CSE 115L
Section	:	12
Group Name	:	G1
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Project Topic	:	Gym Management System
GitHub Repo Link	:	<a href="https://github.com/atiyaibnattasnim/Gym-Management-System">atiyaibnattasnim/Gym-Management-System (github.com)</a>
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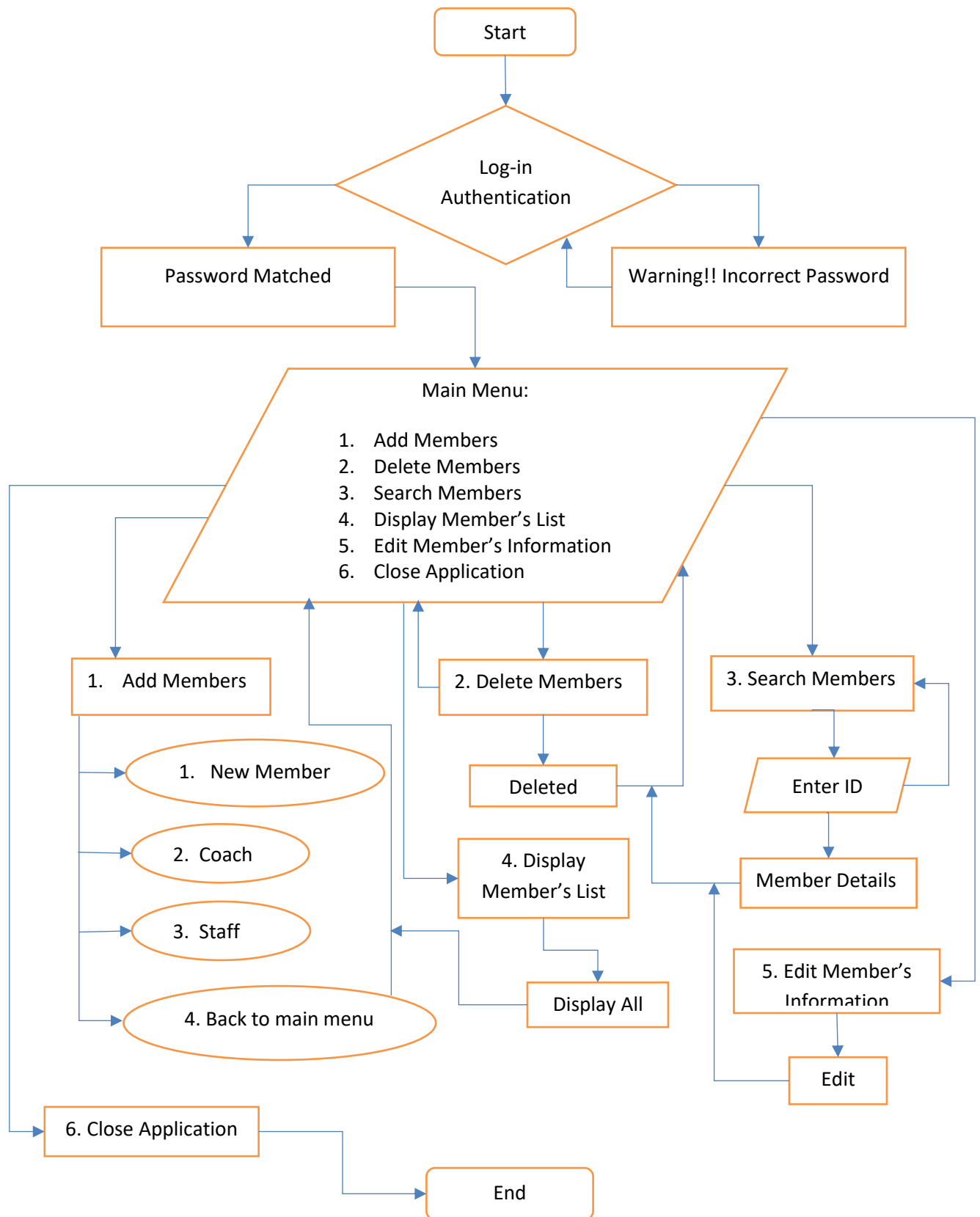
# Lab Project Report

**Introduction of each operation on different features of the project:**

- 1. Log in System:** Here the user is supposed to log in by entering the correct password which has been previously declared in the global variable and set as “project”. If the password matches, “password matched” will be displayed and user will have access to other features otherwise a warning will be displayed stating “Incorrect Password”.
- 2. Main menu:** After logging in, the options named add members, edit member’s record, view members list, search members, remove members will be displayed to the user and can be selected as per need.
- 3. Add members:** Here we open the patient.txt file, input the required data and store in the respective data structure variables.
- 4. Edit member’s record:** Here the desired member’s record can be edited.
- 5. View member list:** Here all registered members will be displayed along with their respective information. We open stf.dat file in rb mode and with fread function, we read member’s records and if the written value comes 1, it means the record is present and it prints the record on the screen and finally closes the file.
- 6. Search members:** With the help of ID a particular member can be searched and all of its data can be known.
- 7. Remove members:** Any desired member can be removed with this feature.

## **Flowchart**

**A general pictorial representation of the program is given below:**



## Screenshots of each operation:

```
int main() {  
    Password();  
    getch();  
    return 0;  
}
```

### Main menu

```
void mainmenu() {  
    system("cls");  
    int i;  
    gotoxy(20,3);  
    printf(" \t\tMAIN MENU \n ");  
    gotoxy(20,5);  
    printf("1. Add Members");  
    gotoxy(20,7);  
    printf("2. Delete Members");  
    gotoxy(20,9);  
    printf("3. Search Members");  
    gotoxy(20,11);  
    printf("4. Display Member's list");  
    gotoxy(20,13);  
    printf("5. Edit Members information");  
    gotoxy(20,15);  
    printf("6. Close Application");  
    gotoxy(20,22);  
    t();  
    gotoxy(20,18);  
    printf("Enter your choice:");  
  
    switch(getch()) {  
        case '1':  
            addMember();  
            break;  
        case '2':  
            deleteMember();  
            break;  
    }
```

```

        case '1':
            addMember();
            break;
        case '2':
            deleteMember();
            break;
        case '3':
            searchMember();
            break;
        case '4':
            viewMember();
            break;
        case '5':
            editMember();
            break;
        case '6':

system("cls");
gotoxy(16,3);
printf("\tGYM Management System");
exit(0);

default:

gotoxy(10,25);
printf("Invalid option.");
if(getch())
mainmenu();
}
}

```

Add member:

```

void addMember() {
    system("cls");
    int i;
    gotoxy(20,5);
    printf("Choose category : ");
    gotoxy(20,7);
    printf("1. New Member");
    gotoxy(20,9);
    printf("2. Coach");
    gotoxy(20,11);
    printf("3. Staff");
    gotoxy(20,13);
    printf("4. Back to main menu");
    gotoxy(20,21);

    printf("Enter your choice:");
    scanf("%d",&s);
    if(s==4)
        mainmenu() ;
    system("cls");
    fp=fopen("stf.dat","ab+");
    if(getdata()==1) {
        m.cat=catagories[s-1];
        fseek(fp,0,SEEK_END);
        fwrite(&m,sizeof(m),1,fp);
        fclose(fp);
        gotoxy(21,14);
        printf("The record is saved");
    }
}

```

```

        printf("3. Staff");
        gotoxy(20,13);
        printf("4. Back to main menu");
        gotoxy(20,21);

        printf("Enter your choice:");
        scanf("%d",&s);
        if(s==4)
            mainmenu();
        system("cls");
        fp=fopen("stf.dat","ab+");
        if(getdata()==1){
            m.cat=catagories[s-1];
            fseek(fp,0,SEEK_END);
            fwrite(&m,sizeof(m),1,fp);
            fclose(fp);
            gotoxy(21,14);
            printf("The record is saved");
            gotoxy(21,15);
            printf("Save any more?(Y / N):");
            if(getch()=='n')
                mainmenu();
            else
                system("cls");
            addMember();
        }
    }
}

```

Delete Member:

```

void deleteMember(){
    system("cls");
    int id;
    char another='y';
    while(another=='y'){
        system("cls");
        gotoxy(10,5);
        printf("Enter ID:");
        scanf("%d",&id);
        fp=fopen("stf.dat","rb+");
        rewind(fp);
        while(fread(&m,sizeof(m),1,fp)==1){
            if(m.id==id){
                gotoxy(10,7);
                printf("The ID is available");
                gotoxy(10,8);
                printf("Name is %s",m.name);
                gotoxy(10,9);
                findMember='t';
            }
        }
        if(findMember!='t'){
            gotoxy(10,10);
            printf("ID is not found");
            if(getch())
                mainmenu();
        }
    }
}

```

```

}
if(findMember!='t'){
    gotoxy(10,10);
    printf("ID is not found");
    if(getch())
        mainmenu();
}

if(findMember=='t'){
    gotoxy(10,9);
    printf("Do you want to delete it?(Y/N):");
    if(getch()=='y'){
        ft=fopen("test.dat","wb+");
        rewind(fp);
        while(fread(&m,sizeof(m),1,fp)==1){
            if(m.id!=id){
                fseek(ft,0,SEEK_CUR);
                fwrite(&m,sizeof(m),1,ft);
            }
        }

        fclose(ft);
        fclose(fp);
        remove("stf.dat");
        rename("test.dat","stf.dat");
        fp=fopen("stf.dat","rb+");
    }
    if(findMember=='t'){
        gotoxy(10,10);
        printf("The record is sucessfully deleted");
        gotoxy(10,11);
        printf("\n\tDelete another record?(Y/N)");
    }

}

fclose(ft);
fclose(fp);
remove("stf.dat");
rename("test.dat","stf.dat");
fp=fopen("stf.dat","rb+");
if(findMember=='t'){
    gotoxy(10,10);
    printf("The record is sucessfully deleted");
    gotoxy(10,11);
    printf("\n\tDelete another record?(Y/N)");
}
}
else
    mainmenu();
fflush(stdin);
another=getch();
}

gotoxy(10,15);
mainmenu();
}

```

Search Member:



```

        gotoxy(20,10);
printf("Name:%s",m.name);
        gotoxy(20,11);
printf("Address:%s ",m.Address);
        gotoxy(20,12);
printf("Contact:%i ",m.contact);
        gotoxy(20,13);
printf("Member Since:%s",m.membersince);
        findMember='t';
    }

    if(findMember!='t'){
        printf("No Record Found");
    }

        gotoxy(20,17);
        printf("Try another search?(Y/N)");
        if(getch()=='y')
            searchMember();
        else
            mainmenu();
            break;
    }

        getch();
        searchMember();
        close(fp);
}

```

Display member:

```

void viewMember(){
    int i=0,j;
    system("cls");
    gotoxy(2,2);
    printf("\n CATEGORY === ID ==== NAME ===== ADDRESS ===== CONTACT ===== JOINING DATE ");
    j=4;
    fp=fopen("stf.dat","rb");
    while(fread(&m,sizeof(m),1,fp)==1){
        gotoxy(1,j);
        printf("%s",m.cat);
        gotoxy(14,j);
        printf("%d",m.id);
        gotoxy(22,j);
        printf("%s",m.name);
        gotoxy(36,j);
        printf("%s",m.Address);
        gotoxy(50,j);
        printf("%i",m.contact);
        gotoxy(67,j);
        printf("%s",m.membersince);
        gotoxy(68,j);
        printf("\n\n");
        j++;
    }
    fclose(fp);
    gotoxy(35,25);
    returnfunc();
}

```

Edit Member:

```

void editMember() {
    system("cls");
    int c=0;
    int d,e;
    char another='y';
    while(another=='y') {
        system("cls");
        gotoxy(15,6);
        printf("Enter Id to be edited:");
        scanf("%d",&d);
        fp=fopen("stf.dat","rb+");
        while(fread(&m,sizeof(m),1,fp)==1) {
            if(checkid(d)==0) {
                gotoxy(15,7);
                printf("This Member is available");
                gotoxy(15,8);
                printf("The ID:%d",m.id);
                gotoxy(15,9);
                printf("Enter new name:");
                scanf("%s",m.name);
                gotoxy(15,10);
                printf("Enter new Address:");
                scanf("%s",m.Address);
                gotoxy(15,11);
                printf("Enter new Contact:");
                scanf("%i",&m.contact);
                gotoxy(15,12);
                printf("Enter New Membership date:");

                scanf("%s",m.name);
                gotoxy(15,10);
                printf("Enter new Address:");
                scanf("%s",m.Address);
                gotoxy(15,11);
                printf("Enter new Contact:");
                scanf("%i",&m.contact);
                gotoxy(15,12);
                printf("Enter New Membership date:");
                scanf("%s",&m.membersince);
                gotoxy(15,13);
                printf("The record is edited");
                fseek(fp,ftell(fp)-sizeof(m),0);
                fwrite(&m,sizeof(m),1,fp);
                fclose(fp);
                c=1;
            }
            if(c==0) {
                gotoxy(15,9);
                printf("No record found");
            }
        }

        gotoxy(15,16);
        printf("Modify another Record? (Y/N)");
        fflush(stdin);
        another=getch();
    }
    returnfunc();
}

```

Exit:

```
void returnfunc() {
{
    gotoxy(15,20);
    printf("Press ENTER to return to main menu");
}

m:
if(getch()==13)
mainmenu();
else
goto m;
}
```

Password:

```
.5 void Password() {
.6     system("cls");
.7     char d[25]="Password Protected";
.8     char ch,pass[10];
.9     int i=0,j;
.10    gotoxy(10,5);
.11    printf("ENTER SYSTEM");
.12    printf("\n\nEnter Password:");
.13    while(ch!=13){
.14        ch=getch();
.15        if(ch!=13 && ch!=8){
.16            putchar('*');
.17            pass[i] = ch;
.18            i++;
.19        }
.20    }
.21    pass[i] = '\0';
.22    if(strcmp(pass,password)==0){
.23        printf("\n\n\n\t\tPassword matched!!");
.24        printf("\n\n\t\tPress any key to countinue.....");
.25        getch();
.26        mainmenu();
.27    }else{
.28        printf("\n\n\n\t\tWarning!! \n\t\t Incorrect Password");
.29        getch();
.30        Password();
.31    }
.32 }
.33
.34
```