Software Engineering

[CSI_5_SFE] – 2019-20

Coursework 1 – Individual Development Project

GYM MANAGEMENT SYSTEM

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❖ Introduction

I believe on having good health is a blessing and a bigger achievement in today's time period. We all know health is wealth. There is no benefit of having all luxurious in life but not having the actual wealth which is health indeed. Become a healthy person should be a right approach which we should empathises on that mostly our attitude reflect our feelings. Being healthy and fit is more important and directing towards to Hessle free life. Physical fitness includes healthy diet, exercise and sleep. Sometime people are not paying attention towards to the very basic things which are really having key elements on every one's life. Undoubtedly every single one should have to be very careful and conscious in relation to moving towards to gaining healthy life.

For the progress and survival of any business, website plays the important role. Not having any website completely missed out the very important powerful tools for Marketing purpose which should be available to the consumers. Especially now a days all businesses should have a website or an app which user can approach easily.

It's a technology period and people are approaching online for any services, shopping, research material and organisation before they go of any selection . For the marketing research, and demand of consumer, online dependency, we decided to develop a website for gym where customer can get all information easily like enrol, plan, dietary requirement and any classes through app or a website.

It used to be that clients regularly using MS Excel and paper work to maintains their records and data. Although, such plans for not authentic and feasible to divided any such data from various system to different environment operated by users. It was creating lots of duplication, and more chances of having errors. Where every time when the data and records required changes they should update every single documents. This Smart Gym System will enhance chance to keep the existing customers and attracting more new.

This system will definitely Increase efficiency, accuracy ,automation, user-friendly interface, quick and fast information, prompt communication, vast capacity, easy to maintain, cost reduction and effectiveness makes any system smarter in comparison of the old and existing system. Where my aim is to adopt and integrate more better and improve features in addition to more prominent and necessary elements which would be more helpful.

Why I decided to choose this topic because my thoughts about this smarter system for Gym Management would be more efficient for those who are in a gym business. Research work on all areas is more important to overcome any major difficulties (it's a first and basic rule). I have thoroughly checked and have my working over that how to make an advance system for registration which have less chance of failing and it's also adopting all different functions. Remember it should be beneficial for any type f user equally

This system of Gym Management will run on a basic requirement ,which that will be able manage every single need and necessary, hidden, open task who's helps to run the database smoothly. Where they can maintain all safety and security measures as per the users requirements. Management needs a software, which not only storing members data its also keeping the employees record, showing various products, employees can access on payroll, invoices availabilities and transactional details.

The main objective of this system is to create a software which is useful to manage all queries, big data, big record and very handy. It's also shows members summary and their personalised plan as well as their weekly, monthly or quarterly plans. It takes care of all their health information as well as gym routine. It's even maintains the data of their nutritional needs as per their dietary

requirements. All data will be stored in the database and its fully maintain by the data protection act and all security features.

The main objectives for this project are:

- User can get easy access via app
- User can raises their queries and can contact with any trainer
- Can book sessions on their own without any hassle
- Can amend their personal record
- Give them information

❖ Development process (Software)

Defining a problem

Every project is defining a problem which is also very important for the growth. The main objective is focus on solving any upcoming, ongoing and hidden problem for the and business and find a positive solution to resolve it. Therefore I believe that this system will have all the measure which set on the object of a new system. It divided into 2 different parts. The initial part is elaborating the activity to review the organizational needs which are the original project requirement.

On the second part, the main focus to identify the theoretical general level and to run with the maximum capabilities of this system. For sure, it helps to achieve and define the goal and partitioning of the system. Better system also giving the reflection of a clear and better understanding of building a system otherwise its putting the whole system into the risk and lead towards to the failure. The clarity of system describe the resources which should be available for this project. Here, the term of Project has used for the reference called on goals, resources limits an project bounds.

Feasibility

During the feasibility study the objectives of systems set on during the distribution on the basis of fundamental, where from the work of system design is commenced. Most of the projections are attached to this stage, and technicality required for the certain level of experience during designing systems, solid computer knowledge, all related technology and full understanding of computers. Key part of it to understand that what are the various facilities are available easily on demand and what other solutions are provided. However, it's not possible to design a system in segregation without the involvement of the active users.

Undoubtedly, user having a very important character or part at this point. We are already aware of collecting data at the stage of feasibility study also be useable for streamline and systematic during the design. Here, another important point is more considerable that detail study is not required at the stage of feasibility study. On the Feasibility study's plan the thorough study would be different and the stage of design will be different for this purpose and any findings for this requirement.

The system investigation is also deal with an urgent activity. Rarely but Sometimes too such investigation might segregate stages between system design and feasibility study. New system design is a very creativity process, whom also shows very logical and lateral thinking. This is very

logical approach whom involving structured moves which follow the end to end product, remembering point is that the personnel competence is reflecting towards to the ideas after the usual functionality and equipment's. Its ensuring that no need to made an efforts to fit older conclusion towards to the new situations.

This part of study reflect few more fantastic solutions to the problem who's play important role for the project. The main focus on feasibility assessing is to control even project development has an appropriate chance of success. It determining the system's output and input. The below mentioned are useful for the project feasibility.

Technical feasibility: it's a massive necessity to check that the suggested system is technically feasible or not, is it meeting the technology requirement and having all requiring skill which is more needful for succeeding the project. There availability is to find the solution towards obtain.

Economic feasibility: When consider the economic feasibility the point of consideration to focus on performance, information and production from the system. It should be sustain cost and benefit of the developing system must. concentration on project should be the first priority as it will give great outcome and response back quicker. Another important part is cost effectiveness

Social feasibility: Initially any system amendment is targeting to showing the work load. Here, its important to determine that the extent of system surely going to facilitate these user for their activities. It should be match with the Operation performance like payroll calculation, salary a and deductions, invoice generation, report printing as per the requirements on any specific need

❖ Requirements

I have chosen this project called Gym management system which used to make easy all transactions, collect and store data. This system is offering an easy and user friendly automate database management and transactions system. It has a facility to keep the record of employee, gym member, payroll record, invoices, classes, session and products information. This system is providing easy data storage and report generating with the usage of graphical user interface (GUI).

2.1 System Study

recognizing the problems and thoroughly study the existing system is a key feature for both existing and new system. In that way it become more helpful to understand the requirements of the new modern and amended system. Study of this system remain helpful towards to finding any alternatives and different solution for constant improvements.

The project study basically deals with different operations:

1: Data collection

2: Understand the Existing System

3: Analysing Problem

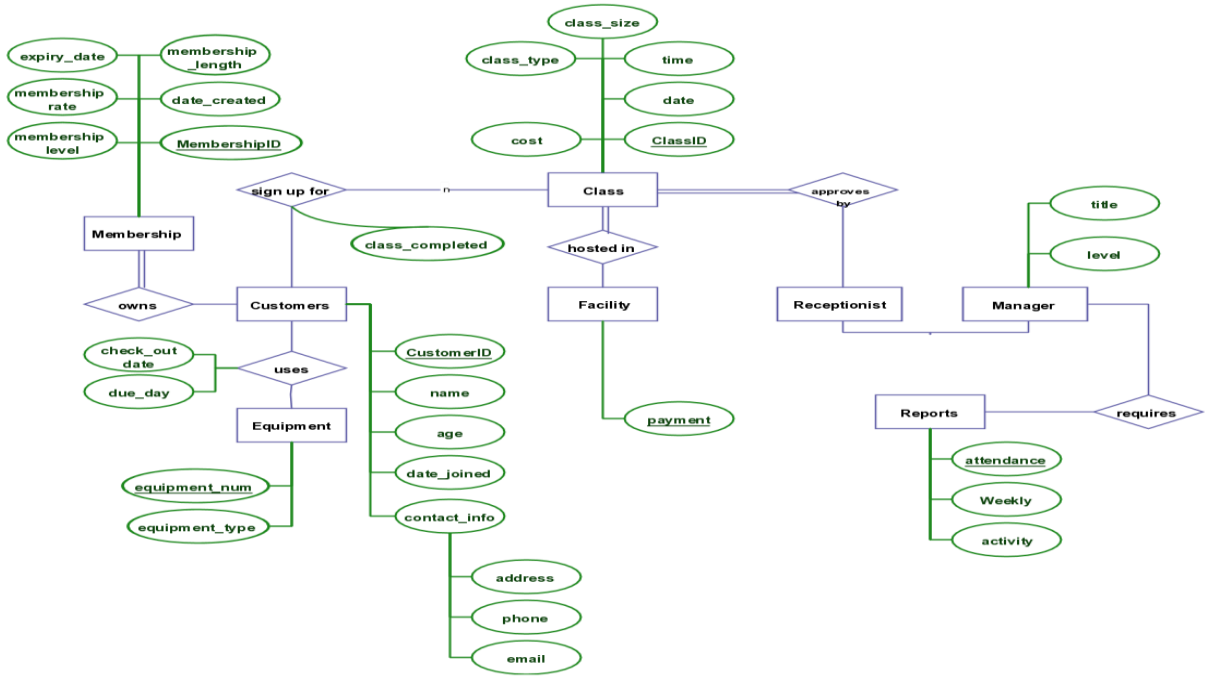
4: Vast study

5: Feasibility for future improvements

❖ Design

Design is basis of all these requirement which are listed below

- ❖ **User case diagram**



- ❖ **User stories**

This design will be very helpful for the gym system user both customers and staff. This system will store the given data into the database including strict security measure. User can use as per their requirements and staff can amend the record as per new program in place. The user will be able to click the provided link where they will choose section, classes and programmes whom they are interested for. This user case diagram showing all the related links and ways whom the user can easily interact with this system. It's clearly shows all the features and factors which will positively effecting the system

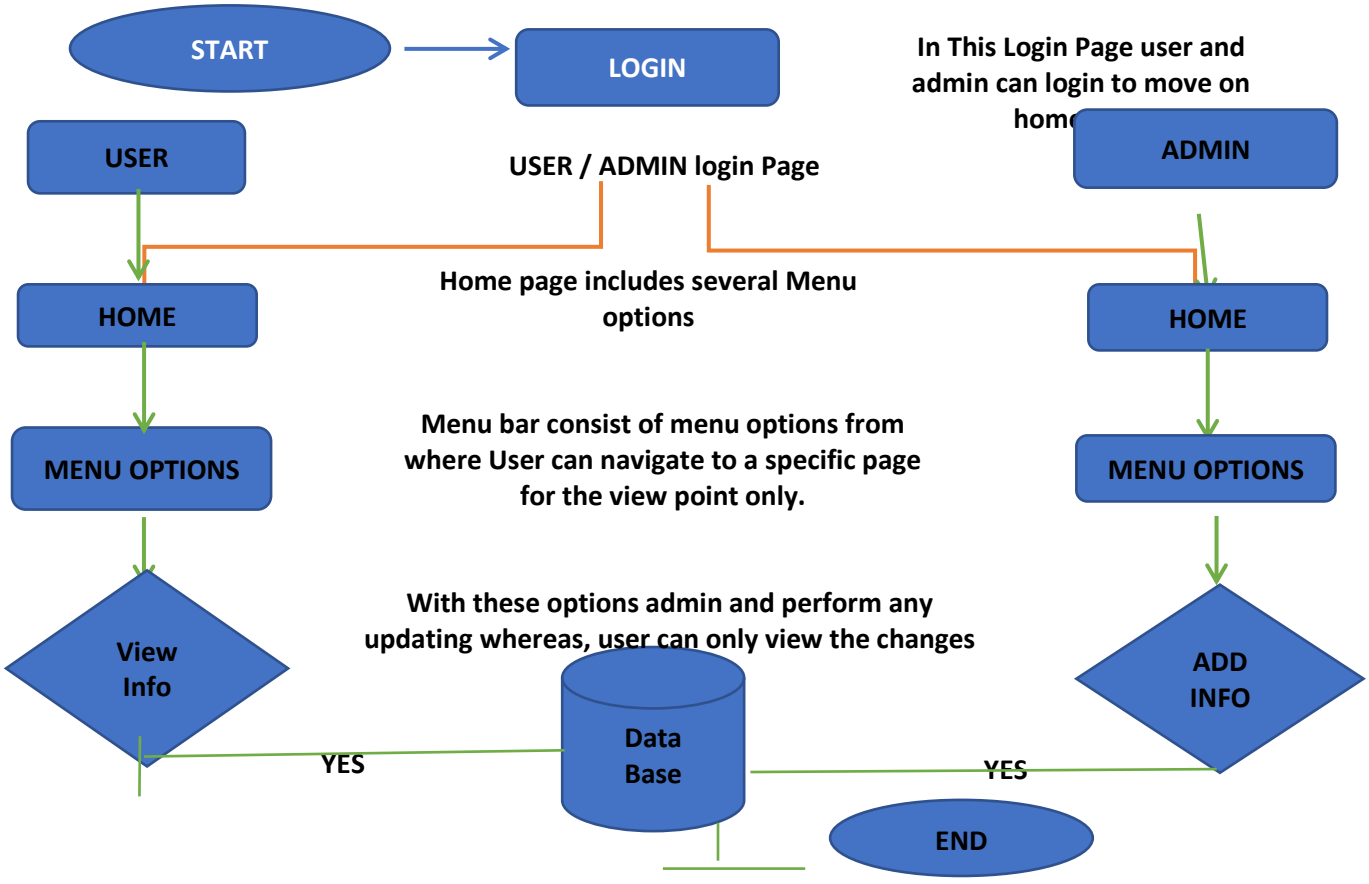
- ❖ It will be helpful the users to choose the right classes and session as per their need
- ❖ It's not very time consuming to stick over the phone to get access gym management system.
- ❖ User can easily access via APP regardless of being anywhere (easy access)
- ❖ In fact it's very handy that a user doesn't need to access on computer but they can do it if they want
- ❖ User have online help which will also saving their time.
- ❖ User can get quick access without wasting any more time to search

- User can search for special offers who's available for registered users only
- User can easily amend their personal data and their monthly plans

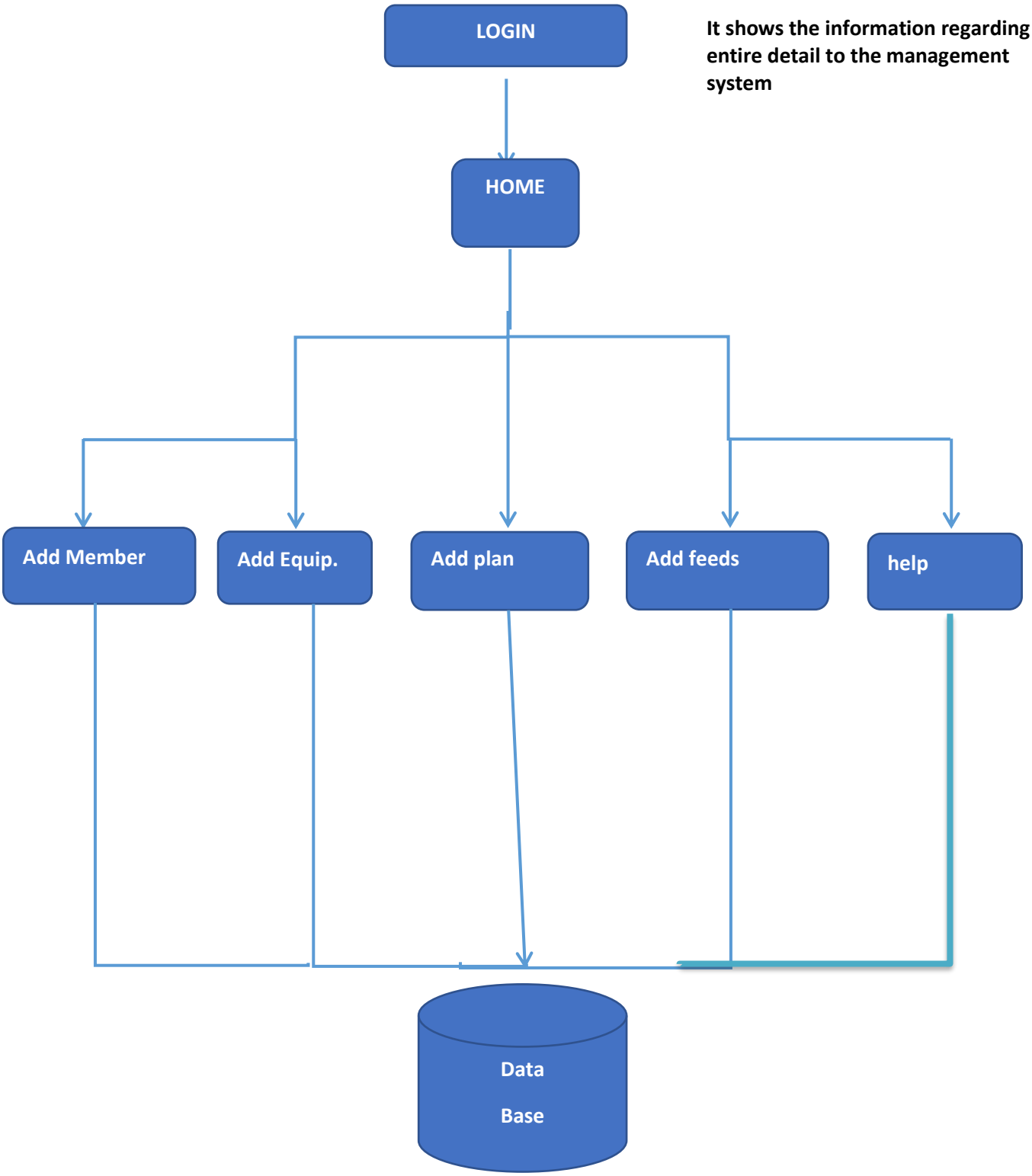
❖ Diagram (activity)

Data Flow Diagram

A DFD (data flow diagram) is a graphical representation which determined the data flow via an information system, modelling its process aspects. The usage of DFD is to show a key step which helps the overview of system creation. DFDs is also useful for the visualization of data processing. A DFD also modify and give the view of type of required information and how use for input to and output to the system like frequency of data (where this data will enter and exit, stored place of data). For sure it's not providing about the processing timing and all relevant processing information.



It defines the flow of the application built in java standard edition moreover it is the symbolic representation of the project.



It shows the information regarding entire detail to the management system

❖ Review (Technical)

I have chosen to work on Gym Management , database management and easily handle transactions project. That system is a review of put forward a modern, online, quick and an automated system which covers database transactions and management. Its linked with everything together and having one window system where can show the detail of employee, registered members, employed payroll record, invoiced, available classes, personal session and PT availability. Where it's helpful for member to book session and enjoy the app, it's also helpful for staff to search and work more quickly and efficiently. Graphical user interface (GUI) resources has used for this system to help with data storing and report generation as per requirement

Following are the steps taken during the initial study:

Initial part is to collect all relevant information, whom going to be store. After that I thoroughly studied and planned manual working to the current system . I do mentioned that I had a limitation about this system which surely motivated them towards to moving from old to a new system. After having all these manual working, I got a clear picture and a great ideas about the required system and a better vision of any outcome of the advanced system.

The most important part at that point is and was to understand the requirement and study accordingly in detail which cover all cons and pos. I had a good comparison of both system (existing and proposed system) which would be more helpful to understand advantages and disadvantages of the systems and can be understood easily. These projections and analysis has done related to changes and has to be made to the existing system.

Existing System

An Existing system is a system which has been used until today's date where it was mainly working manually or not having a proper update system. I must say that its very old fashioned which based on lots of paper work including membership form, which also badly effect on cost. Its not easy to handle any project manually as the result is slower and not coming with the right requirements, where its more easy to work on modern and on an proper system
There are some reasons have given below:

1. To cost reduction and increase the efficiency.
2. To out from paper world and modernised the system to online based
3. Less time consuming for both users and colleagues
4. To have up to date data and easy to handle and man analysis age

Proposed System

Undoubtedly, this new system is very user-friendly where anyone can manage via website or an app. This new modern automated system shows better sign of improvement and their functionality is also very user friendly and its beneficial for both (users, colleagues). The design is simple which attract everyone and easy to adopt for any amendments and for implement. The requirements of system are

not very hight and it will be easy to manage afterward when will in operation and it will configure as per the system resources.

Key objectives:

1. Enhancement:

The actual object behind this project was to change the complete old system to new, where its increased the efficiency, speed, accuracy and effectiveness. Although it will completely reverse the system and it might seems difficult to use but after a training colleague will perform better and finish works on time.

2. Automated:

This new Gym System changes completely from manual to automation which improve the activity and give the quick response throughput in the day activity.

Accurate:

This System will helps to provide quick and accurate response with very correct information about any raised query or information. Accuracy and efficiency is key element as per the desire and requirement

User-Friendly:

This gym software system is undoubtedly very user- friendly where a registered user or non-registered users can work easily without any hassle and look for any offers in home. Naturally accuracy is a key feature and will give a pleasant interface to users because its advance, up to date and very handy.

3. Available 24/7

It's also very easy to retrieve any payment transaction or any required reports with very easy commands. Hence, there will be no delay for generating such information, can be produced as per the requirement along with recent and old.

4. Maintenance Cost:

Reduce the cost of maintenance.

5. Merits of new system:

Firstly, it is the best way to stop deforestation along with this it is one of the easiest method to register a new member as well as trainer or instructor.

1. It is easy.
2. It is time saving way.
3. It is more efficient.
4. It is secure.
5. It is easy to use

❖ Implementation

I have follow the MVC (Model View Controller) design the developing pattern this system. It is a unique software who's design is having those required pattern which using for implementation all user interfaces. It has divided into three interconnected parts for the given and required application for this software. As to detached the intramural representations for the particular from the method that detail has introduced to user and the users has accepted.

- **Model:** All behaviour and this application of data which manages model and the application domain is the data behaviour. Its links as per the responses to the information requests . Then the response of the command to change position from the controller.

- **View:** This view part is help to carry and show the exhibit of particular

- **Controller:** Its explain the connection between all elements and its give the understanding to control the keyboard and mouse.

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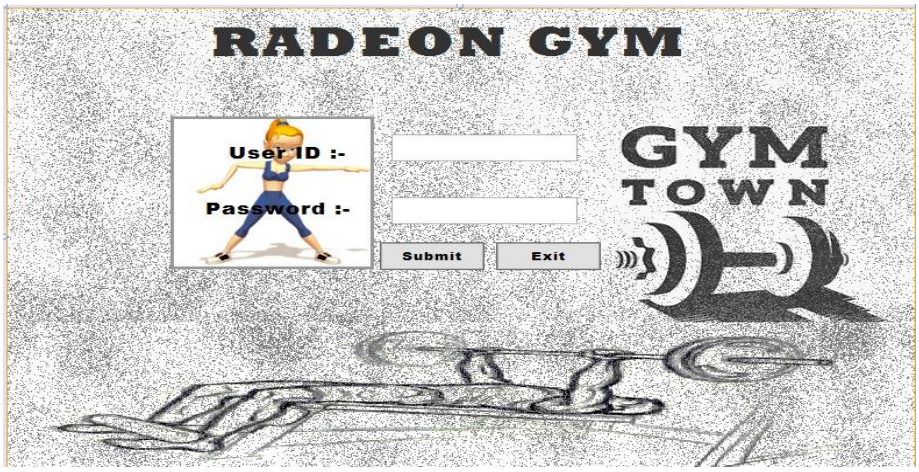

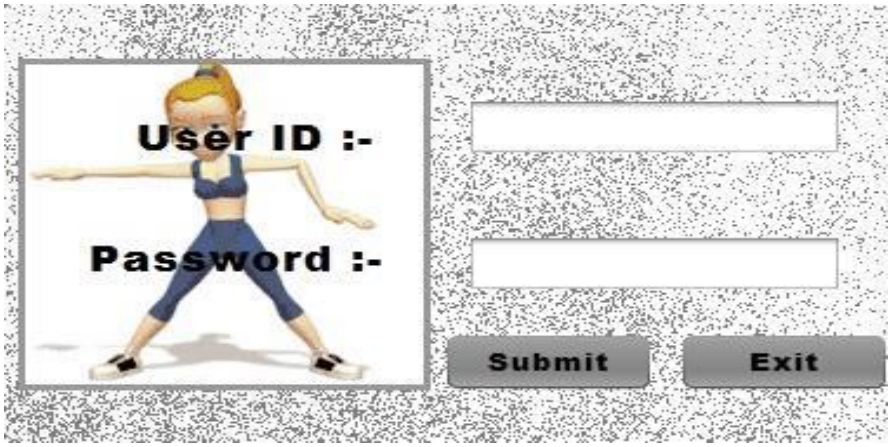

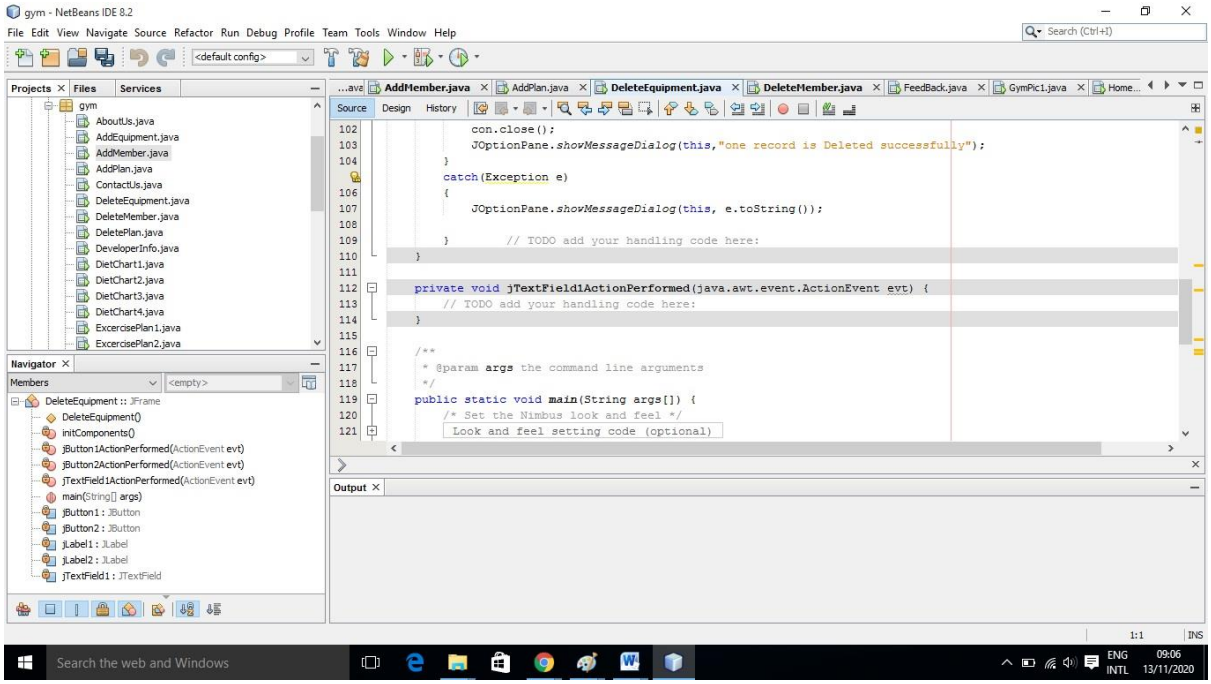
gym - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Projects Files Services
gym
AboutUs.java
AddEquipment.java
AddMember.java
AddPlan.java
ContactUs.java
DeleteEquipment.java
DeleteMember.java
DeletePlan.java
DeveloperInfo.java
DietChart1.java
DietChart2.java
DietChart3.java
DietChart4.java
ExcercisePlan1.java
ExcercisePlan2.java
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DeleteEquipment()
initComponents()
jButton1ActionPerformed(ActionEvent evt)
jButton2ActionPerformed(ActionEvent evt)
jTextField1ActionPerformed(ActionEvent evt)
main(String[] args)
jButton1 : JButton
jButton2 : JButton
jLabel1 : JLabel
jLabel2 : JLabel
jTextField1 : JTextField
AddMember.java
AddPlan.java
DeleteEquipment.java
DeleteMember.java
FeedBack.java
GymPic1.java
Source Design History
con.close();
JOptionPane.showMessageDialog(this,"one record is Deleted successfully");
catch(Exception e)
JOptionPane.showMessageDialog(this, e.toString());
// TODO add your handling code here:
private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
// TODO add your handling code here:
/**
* @param args the command line arguments
*/
public static void main(String args[]) {
/* Set the Nimbus look and feel */
Look and feel setting code (optional)
Output
1:1
INS
Search the web and Windows
ENG
INTL
09:06
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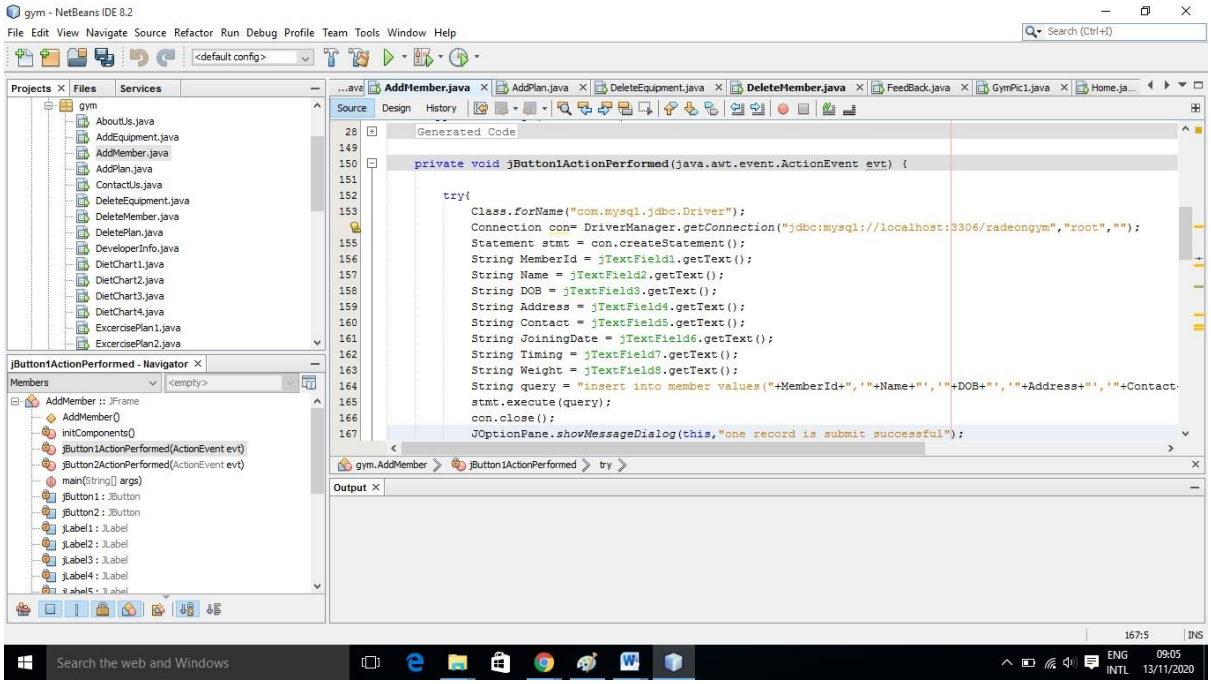
gym - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
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gym
AboutUs.java
AddEquipment.java
AddMember.java
AddPlan.java
ContactUs.java
DeleteEquipment.java
DeleteMember.java
DeletePlan.java
DeveloperInfo.java
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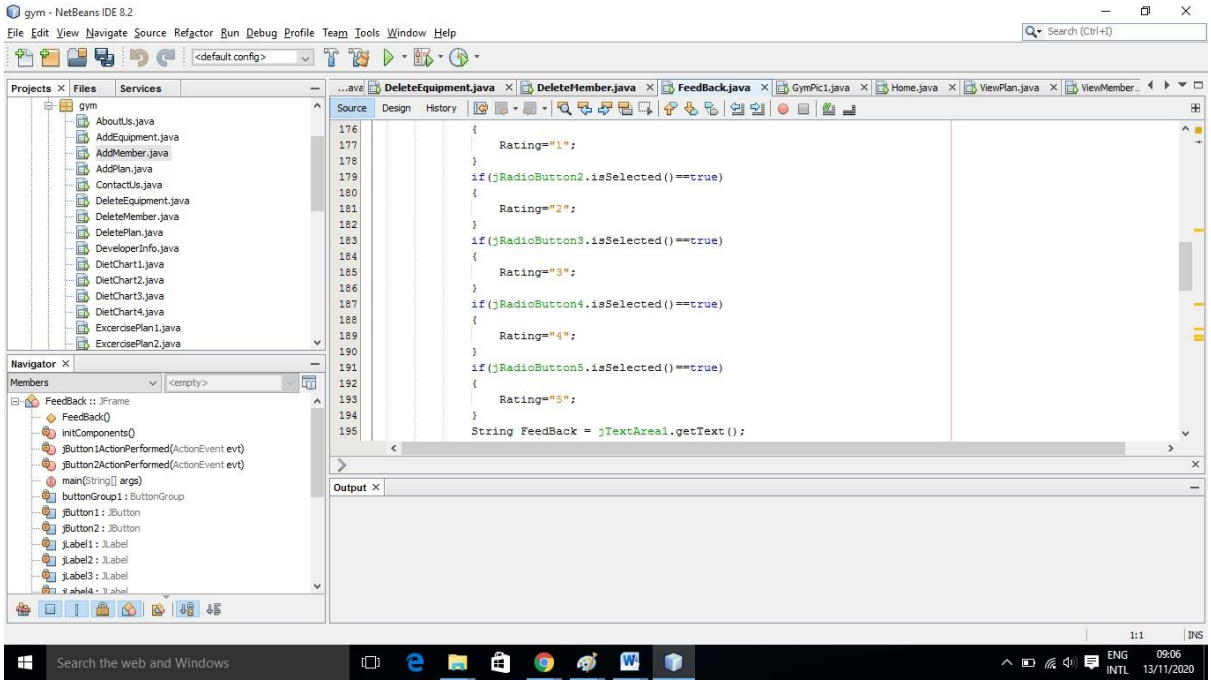
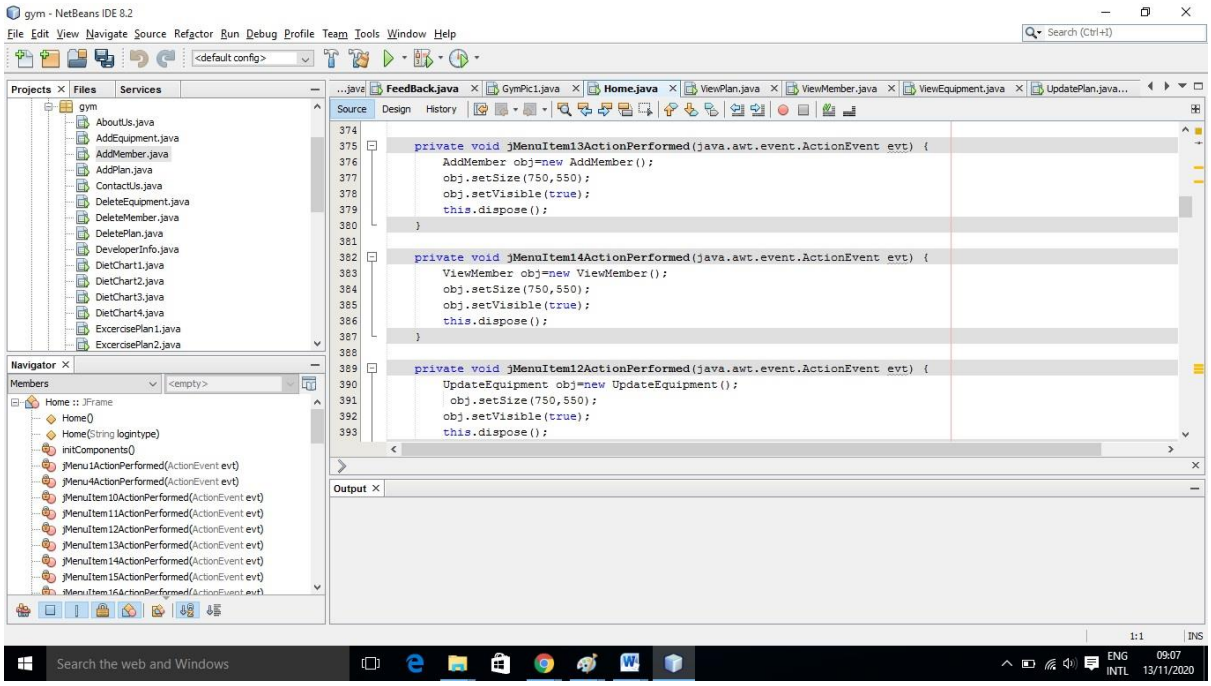
jButton1ActionPerformed - Navigator
Members
AddMember :: JFrame
AddMember()
initComponents()
jButton1ActionPerformed(ActionEvent evt)
jButton2ActionPerformed(ActionEvent evt)
main(String[] args)
jButton1 : JButton
jButton2 : JButton
jLabel1 : JLabel
jLabel2 : JLabel
jLabel3 : JLabel
jLabel4 : JLabel
AddMember.java
AddPlan.java
DeleteEquipment.java
DeleteMember.java
FeedBack.java
GymPic1.java
Source Design History
Generated Code
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con= DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
Statement stmt = con.createStatement();
String MemberId = jTextField1.getText();
String Name = jTextField2.getText();
String DOB = jTextField3.getText();
String Address = jTextField4.getText();
String Contact = jTextField5.getText();
String JoiningDate = jTextField6.getText();
String Timing = jTextField7.getText();
String Weight = jTextField8.getText();
String query = "insert into member values("+MemberId+",'"+Name+"','"+DOB+"','"+Address+"','"+Contact
stmt.execute(query);
con.close();
JOptionPane.showMessageDialog(this,"one record is submit successful");
gym.AddMember
jButton1ActionPerformed
try
Output
167:5
INS
Search the web and Windows
ENG
INTL
09:05
13/11/2020






```
package gym;

import java.sql.*;

import javax.swing.JOptionPane;

public class Login extends javax.swing.JFrame {

    /*

     * Creates new form gym
```

```
 */
public Login() {
    initComponents();
}
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * the Form Editor the regenerates
 */
@Warningsmoves("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jPanel1 = new javax.swing.JPanel();
    jFileChooser1 = new javax.swing.JFileChooser();
    jLabel3 = new javax.swing.JLabel();
    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jPasswordField1 = new javax.swing.JPasswordField();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel5 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setTitle("Gym Management System");
    setBackground(new java.awt.Color(51, 51, 51));
    setForeground(new java.awt.Color(51, 51, 51));
    setMinimumSize(new java.awt.Dimension(780, 550));
    setName("Gym Management System"); // NOI18N
```

```
setResizable(false);
getContentPane().setLayout(null);

jPanel1.setLayout(null);
jPanel1.add(jFileChooser1);
jFileChooser1.setBounds(0, 0, 582, 397);

getContentPane().add(jPanel1);
jPanel1.setBounds(10, 88, 0, 0);

jLabel3.setBackground(new java.awt.Color(255, 51, 51));
jLabel3.setFont(new java.awt.Font("Rockwell Extra Bold", 1, 48)); // NOI18N
jLabel3.setForeground(new java.awt.Color(51, 51, 51));
jLabel3.setText("RADEON GYM");
getContentPane().add(jLabel3);
jLabel3.setBounds(130, 10, 500, 50);

jLabel1.setFont(new java.awt.Font("Arial Black", 1, 18)); // NOI18N
jLabel1.setText("User ID :-");
getContentPane().add(jLabel1);
jLabel1.setBounds(190, 140, 110, 40);

jLabel2.setFont(new java.awt.Font("Arial Black", 1, 18)); // NOI18N
jLabel2.setText("Password :-");
getContentPane().add(jLabel2);
jLabel2.setBounds(170, 210, 140, 24);

jTextField1.setForeground(new java.awt.Color(102, 102, 102));
getContentPane().add(jTextField1);
jTextField1.setBounds(330, 140, 160, 30);
```

```
jPasswordField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jPasswordField1ActionPerformed(evt);
    }
});
getContentPane().add(jPasswordField1);
jPasswordField1.setBounds(330, 210, 160, 30);

jButton1.setBackground(new java.awt.Color(102, 102, 102));
jButton1.setFont(new java.awt.Font("Arial Black", 1, 12)); // NOI18N
jButton1.setText("Submit");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});
getContentPane().add(jButton1);
jButton1.setBounds(320, 260, 90, 31);

jButton2.setBackground(new java.awt.Color(102, 102, 102));
jButton2.setFont(new java.awt.Font("Arial Black", 1, 12)); // NOI18N
jButton2.setText("Exit");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});
getContentPane().add(jButton2);
jButton2.setBounds(420, 260, 90, 31);
```

```
jLabel5.setIcon(new javax.swing.ImageIcon(getClass().getResource("/gym/backgimg/gym-spor2-1.gif"))); // NOI18N

jLabel5.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(153, 153, 153), 3));

getContentPane().add(jLabel5);

jLabel5.setBounds(140, 120, 175, 170)


jButton2.setBackground(new java.awt.Colour(102, 102, 102));

jButton2.setFont(new java.awt.Font("Arial Black", 1, 12)); // NOI18N

jButton2.setText("Exit");

jButton2.addActionListener(new java.awt.event.ActionListener) {

   public void actionPerformed(java.awt.event.ActionEvent evt) {

      jButton2ActionPerformed(evt);
```

Admin Module:

Administrator is controlling of this system and the features and few ares ars :

Adding member


```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {


   try{

      Class.forName("com.mysql.jdbc.Driver");
```

```
        Connection con=
DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
        Statement stmt = con.createStatement();
        String MemberId = jTextField1.getText();
        String Name = jTextField2.getText();
        String DOB = jTextField3.getText();
        String Address = jTextField4.getText();
        String Contact = jTextField5.getText();
        String JoiningDate = jTextField6.getText();
        String Timing = jTextField7.getText();
        String Weight = jTextField8.getText();
        String query = "insert into member
values("+MemberId+",'"+Name+"','"+DOB+"','"+Address+"','"+Contact+"','"+JoiningDate+"','"+Timing
+"','"+Weight+"')";
          stmt.execute(query);
          con.close();
          JOptionPane.showMessageDialog(this,"one record is submit successful");
      }
      catch(Exception e)
      {
        JOptionPane.showMessageDialog(this, e.toString());
      }   }
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      Home obj = new Home();
      obj.setSize(750,550);
      obj.setVisible(true);
      this.dispose();

   }
   /**
    * @param args the command line arguments
```

```
    */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName
```

ADD NEW GYM EQUIPMENT


```
//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
/* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
 * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
 */
try {
    for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
        if ("Nimbus".equals(info.getName())) {
            javax.swing.UIManager.setLookAndFeel(info.getClassName());
            break;
        }            }
} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
} catch (IllegalAccessException ex) {
    java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.Sll,
ex);
} catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(AddMember.class.getName()).log(java.util.logging.Level.SEVERE,



package gym;


/**
 *
 * @author Ms Ahmed
 */
public class Home extends javax.swing.JFrame {


    /**
     * Creates new form page2
     */
    public static String logintype="";
    public Home() {
        initComponents();
        if(logintype.equals("user"))
        {
            this.logintype = logintype;
            jMenuItem13.setEnabled(false);
            jMenuItem1.setEnabled(false);
            jMenuItem2.setEnabled(false);
            jMenuItem11.setEnabled(false);
            jMenuItem12.setEnabled(false);
            jMenuItem15.setEnabled(false);


        }       }
```

```
public Home(String logintype) {
    initComponents();
    if(logintype.equals("user"))
    {
        this.logintype = logintype;
        jMenuItem13.setEnabled(false);
        jMenuItem1.setEnabled(false);
        jMenuItem2.setEnabled(false);
        jMenuItem11.setEnabled(false);
        jMenuItem12.setEnabled(false);
        jMenuItem15.setEnabled(false);
    }        }
/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jComboBox1 = new javax.swing.JComboBox();
    jLabel5 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel1 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jMenuBar1 = new javax.swing.JMenuBar();
    jMenu4 = new javax.swing.JMenu();
    jMenuItem13 = new javax.swing.JMenuItem();
```

```
        jMenuItem14 = new javax.swing.JMenuItem();
        jMenuItem1 = new javax.swing.JMenuItem();
        jMenuItem2 = new javax.swing.JMenuItem();
        jMenu3 = new javax.swing.JMenu();
        jMenuItem11 = new javax.swing.JMenuItem();
        jMenuItem12 = new javax.swing.JMenuItem();
        jMenuItem15 = new javax.swing.JMenuItem();
        jMenuItem20 = new javax.swing.JMenuItem();
        jMenu5 = new javax.swing.JMenu();
        jMenuItem6 = new javax.swing.JMenuItem();
        jMenuItem7 = new javax.swing.JMenuItem();
        jMenuItem8 = new javax.swing.JMenuItem();
        jMenuItem21 = new javax.swing.JMenuItem();
        jMenu6 = new javax.swing.JMenu();
        jMenuItem17 = new javax.swing.JMenuItem();
        jMenuItem18 = new javax.swing.JMenuItem();
        jMenuItem19 = new javax.swing.JMenuItem();
        jMenu2 = new javax.swing.JMenu();
        jMenuItem9 = new javax.swing.JMenuItem();
        jMenuItem10 = new javax.swing.JMenuItem();
        jMenuItem16 = new javax.swing.JMenuItem();
        jMenuItem4 = new javax.swing.JMenuItem();
        jMenu1 = new javax.swing.JMenu();
        jMenuItem3 = new javax.swing.JMenuItem();

        jComboBox1.setModel(new javax.swing.DefaultComboBoxModel(new String[] { "Item 1", "Item 2", "Item 3", "Item 4" }));

        jLabel5.setText(" ");
        jLabel5.setMaximumSize(new java.awt.Dimension(750, 550));
        jLabel5.setMinimumSize(new java.awt.Dimension(750, 550));
```

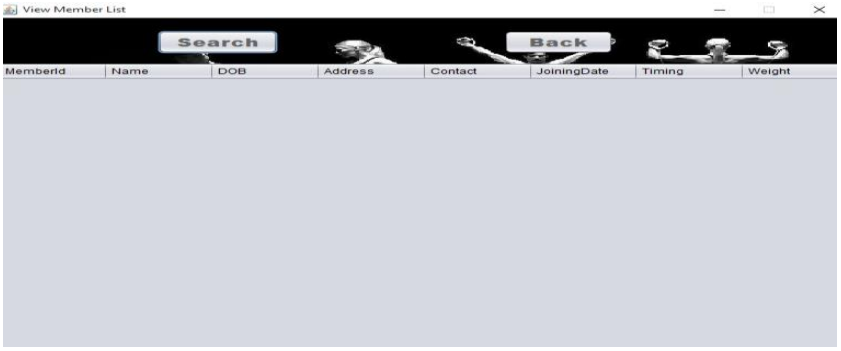
```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

setTitle("HOME PAGE");

setBackground(new java.awt.Color(0, 0, 0));

setMaximumSize(new java.awt.Dimension(780, 550));

setMinimumSize(new java.awt.Dimension(780, 550));

setResizable(false);

getContentPane().setLayout(null);


jLabel2.setFont(new java.awt.Font("Stencil", 1, 48)); // NOI18N

jLabel2.setForeground(new java.awt.Color(102, 102, 102));

jLabel2.setText("Radeon gym");

getContentPane().add(jLabel2);

jLabel2.setBounds(190, 10, 380, 80);


jLabel1.setFont(new java.awt.Font("Gill Sans MT", 3, 24)); // NOI18N

jLabel1.setForeground(new java.awt.Color(51, 51, 51));

jLabel1.setText("<html><body>Radeon as this system will bring a new approach towards to membership. To avoiding  undue costs (keep everything based on  simplicity, straight forward and streamlines the process by doing this) and this focus on all relevant matters: amazing  equipment within the great space – my aim is reduce the costs and delivering  a high quality gym standard with unique experience. It will be  offering a unique experience to members. Where one to one personal training, sports rehabilitation,  Classes and all sessions are  also with more excitement based on the services, which would be helpful to  achieve the required goals.  </body></html>");

getContentPane().add(jLabel1);

jLabel1.setBounds(40, 30, 560, 410);

getContentPane().add(jLabel3);

jLabel3.setBounds(0, 0, 0, 0);


jLabel6.setIcon(new javax.swing.ImageIcon(getClass().getResource("/gym/backgimg/dfgh.gif"))); // NOI18N

jLabel6.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(102, 102, 102), 4));

getContentPane().add(jLabel6);
```

```
        jLabel6.setBounds(600, 100, 170, 190);


        jLabel4.setIcon(new
javax.swing.ImageIcon(getClass().getResource("/gym/backgimg/home.jpg"))); // NOI18N
        getContentPane().add(jLabel4);
        jLabel4.setBounds(0, -30, 780, 530);


        jMenuBar1.setBackground(new java.awt.Color(102, 102, 102));
        jMenuBar1.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0),
4));
        jMenuBar1.setBorderPainted(false);


        jMenu4.setBackground(new java.awt.Color(102, 102, 102));
        jMenu4.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));
        jMenu4.setText("Member");
        jMenu4.setBorderPainted(true);
        jMenu4.setFont(new java.awt.Font("Arial Black", 3, 14)); // NOI18N
        jMenu4.setIconTextGap(20);
        jMenu4.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jMenu4ActionPerformed(evt);
            }
        });


jMenuItem13.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_A,
java.awt.event.InputEvent.CTRL_MASK));
        jMenuItem13.setFont(new java.awt.Font("Arial Black", 3, 12)); // NOI18N
        jMenuItem13.setText("Add member");
        jMenuItem13.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {
                jMenuItem13ActionPerformed(evt);
```

```
        }
    });
    jMenu4.add(jMenuItem13);

jMenuItem14.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_L,
java.awt.event.InputEvent.CTRL_MASK));
    jMenuItem14.setFont(new java.awt.Font("Arial Black", 3, 12)); // NOI18N
    jMenuItem14.setText("View Members");
    jMenuItem14.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jMenuItem14ActionPerformed(evt);
        }
    });
    jMenu4.add(jMenuItem14);

    jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_U,
java.awt.event.InputEvent.CTRL_MASK));
    jMenuItem1.setFont(new java.awt.Font("Arial Black", 3, 12)); // NOI18N
    jMenuItem1.setText("Update member");
    jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jMenuItem1ActionPerformed(evt);
        }
    });
    jMenu4.add(jMenuItem1);

    jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_D,
java.awt.event.InputEvent.CTRL_MASK));
    jMenuItem2.setFont(new java.awt.Font("Arial Black", 3, 12)); // NOI18N
    jMenuItem2.setText("delete member");
    jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
```

```
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jMenuItem2ActionPerformed(evt);
        }
    });
    jMenu4.add(jMenuItem2);

    jMenuBar1.add(jMenu4);
```

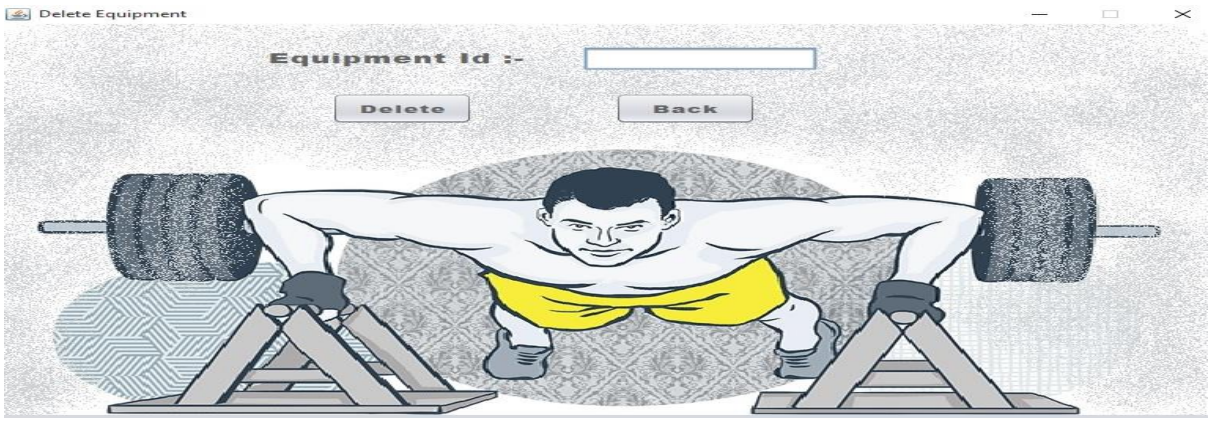
view member :




```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try{
        DefaultTableModel dtm = (DefaultTableModel)jTable1.getModel();
        Class.forName("com.mysql.jdbc.Driver");
        Connection con=
DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
        Statement stmt = con.createStatement();
        ResultSet rs = stmt.executeQuery("select * from member");
        while(rs.next())
        {
          String a = rs.getString("MemberId");
        String b = rs.getString("Name");
        String c = rs.getString("DOB");
        String d = rs.getString("Address");
        String e = rs.getString("Contact");
        String f = rs.getString("JoiningDate");
        String g = rs.getString("Timing");
```

```
            String h = rs.getString("Weight");
            Object data[]={a,b,c,d,e,f,g,h};
            dtm.addRow(data);
            }

        con.close();
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
    // Variables declaration - do not modify
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton2;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JScrollPane jScrollPane1;
```

Delete equipment:




```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
        Home obj = new Home();
        obj.setSize(750,550
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
Class.forName("com.mysql.jdbc.Driver");
```

Connection con= DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","") Statement stmt = con.createStatement();

String EquipmentId = jTextField1.getText();

String query = "delete from equipment where EquipmentId="+EquipmentId;

stmt.execute(query); JOptionPane.showMessageDialog(this, e.toString());

❖ Update equipment:


```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try{
      String EquipmentId = jTextField1.getText();
      Class.forName("com.mysql.jdbc.Driver");
      Connection con= DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
      Statement stmt = con.createStatement();
      String query = "select * from equipment where EquipmentId="+EquipmentId;
      ResultSet rs = stmt.executeQuery(query);
      if(rs.next())
      {
      jTextField1.setText(rs.getString("EquipmentId"));
      jTextField2.setText(rs.getString("EquipmentName"));
      jTextField3.setText(rs.getString("DateOfPurchase"));
      jTextArea1.setText(rs.getString("PurchaseDetail"));
```

```
            jTextField4.setText(rs.getString("Price"));
            jComboBox1.setSelectedItem(rs.getString("category"));
            }
            con.close();
        } catch(Exception e)
        {
            JOptionPane.showMessageDialog(this, e.toString());
        }     }
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
         try{
            String EquipmentId = jTextField1.getText();
            String EquipmentName = jTextField2.getText();
            String DateOfPurchase = jTextField3.getText();
            String PurchaseDetail = jTextArea1.getText();
            String Price = jTextField4.getText();
            String Category = jComboBox1.getSelectedItem().toString();
            Class.forName("com.mysql.jdbc.Driver");
            Connection con=
DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
              Statement stmt = con.createStatement();
            String query = "update equipment set
EquipmentName='"+EquipmentName+"',DateOfPurchase='"+DateOfPurchase+"',PurchaseDetail='"+
PurchaseDetail+"',Price='"+Price+"',Category='"+Category+"' where
EquipmentId='"+EquipmentId+"'";
            stmt.execute(query);
                    JOptionPane.showMessageDialog(this,"one record is updated successful"
```

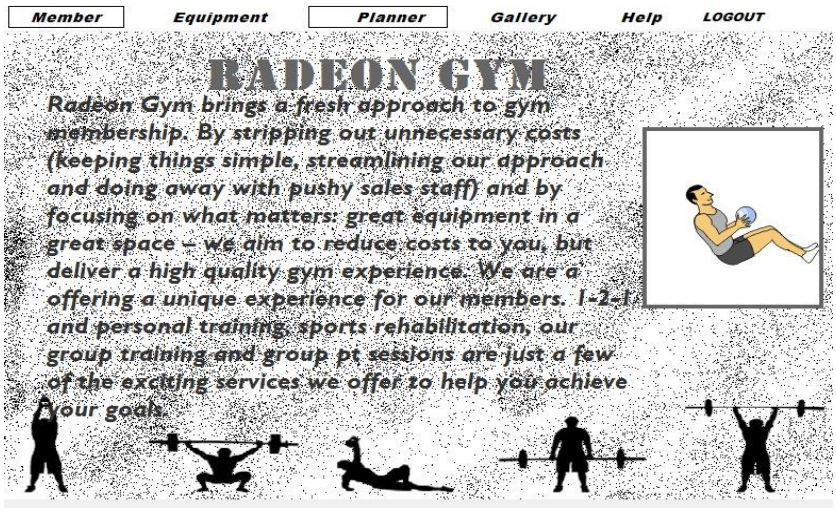
Add plan:


```
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
        Home obj = new Home();
        obj.setSize(750,550);
        obj.setVisible(true);
        this.dispose();
    }
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        try{
            Class.forName("com.mysql.jdbc.Driver");
            Connection con=
DriverManager.getConnection("jdbc:mysql://localhost:3306/radeongym","root","");
            Statement stmt = con.createStatement();
            String MemberId = jTextField1.getText();
            String DietInformation = jTextArea1.getText();
            String ExcerciseInformation = jTextArea2.getText();

            String query = "insert into plan
values("+MemberId+",'"+DietInformation+"','"+ExcerciseInformation+"')";
            stmt.execute(query);
            con.close();
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
         * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
         */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
```

```
            break;
        }           }
    } catch (ClassNotFoundException ex) {
java.util.logging.Logger.getLogger(AddPlan.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
java.util.logging.Logger.getLogger(AddPlan.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
java.util.logging.Logger.getLogger(AddPlan.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

❖ Developer Information



❖ Evaluation (Critical)

I feels and thinks that I have created so many target for myself where I have set the certain standard and working to achieve. At the time of choosing topic, I didn't pay much attention and I though it would be very easy to plan and work. After working and reading on the requirements, I realized it's not easy to choose and work, especially where we have to use stake to use two languages. Like I mentioned earlier that I was not very much focus and not aware of the importance of this project at the beginning but moving towards to the right directions slowly and gradually which has giving me a sense of achieving my goals at set time.

That software system helps to store the data detail whom related to gym user and staff. The system is strong enough to be a voice of its own and generate the power of operations under conditions where they will find maintained database. It will be helpful to reduce time, cost, data entry, generating report, these all factors will be considerable for the implementing to this system for any company.

In nut shell, the main reason behind a project whose build a systematic program to maintains all members details, employees and inventory .The basic requirement of this developed system developed should be able to meet the required requirements. The management's record for both (employees and members) and it would be beneficial of the records (both members and employees) and would be will also achieving the desired requirement for the proposed system. It will be online

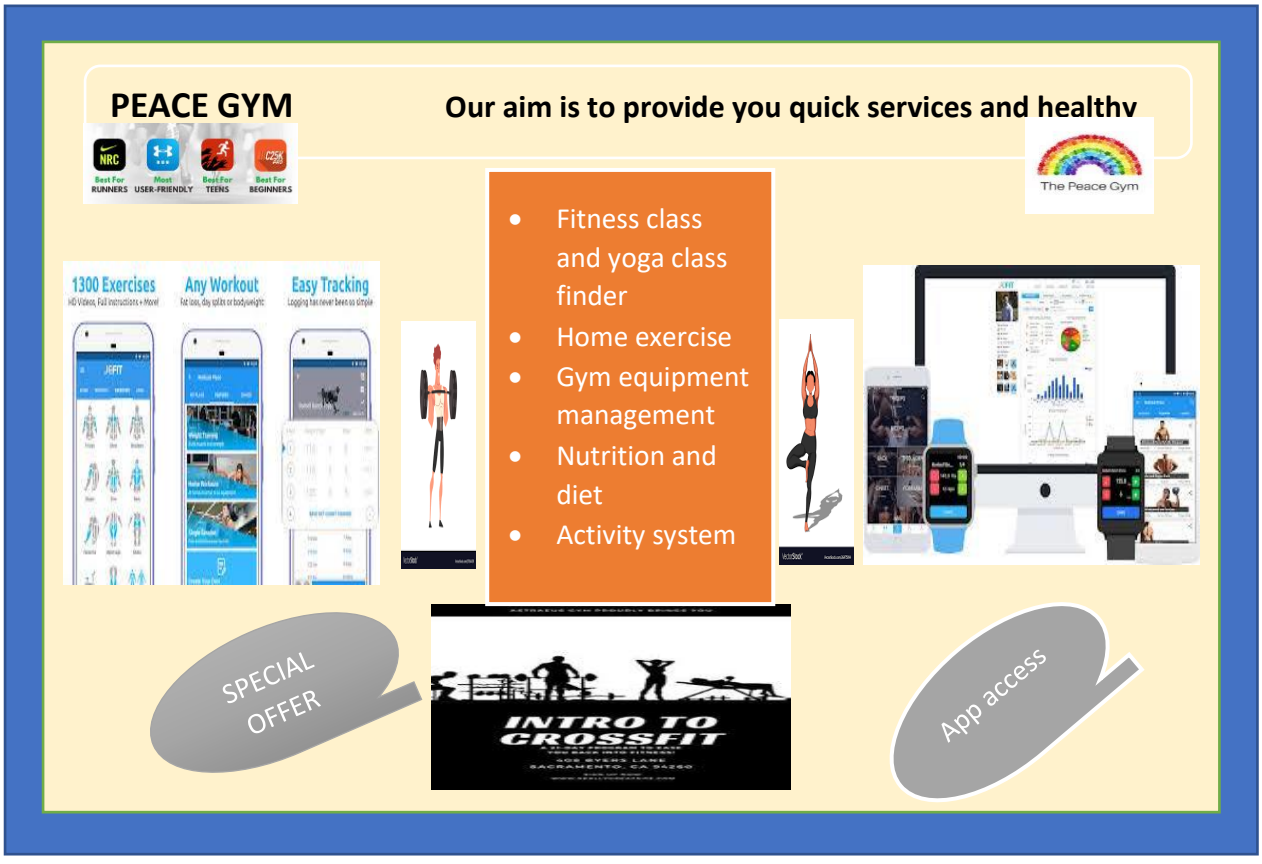
system will work on the whole system, undoubtedly it will be helpful to minimise the pressure of undue workload.

I will definitely add here, the system required an improvement and amendment at any stage which is also important, importantly for maintaining the system efficiency. The system should be adoptable and can be modify as per the future requirements and changes. The different modules has been factored into system to make a better system in case any further adaptation and changes are required. Any hard work and effort has been created to understand the user needs and requirements to make it more user friendly. .

Being a student we have a time frame to complete this project, we are not professional so we still call a short time period has allowed for development of it. I did my best to give my best and all efforts to get the right outcome and produce a very efficient project. I do admit that in the execution of it and many areas still needs lots of improvements. I will say that the application of this project can be create more attractively. I believe that this project and all other modules should be upgraded which would be helpful for the administrator. Strong system security required for a strong system and should be checked on regular basis. I think I should add more features for an app where users get more flexibility to use. Due to recent covid situation Video appointment should be available. Face recognition would be an extra features for any online activities. Q code should be issue to the members to enter in the gym which could be replaced to the pin of touch system.

If I would have more time then my working would be far better than that but I will still praise and admit my working after having all hurdle. It was a constant learning process from creating idea, gathering information, thinking, studies, critical thinking, facts and features and mainly the right usage of tech stack. I will develop more project on my own to enhance my skills and to improve my abilities, where any task in the future will not be problematic for me. Indeed I learned various aspects and technique towards to achieving the better outcome within a certain time scale. I must admit that my confidence has boost a lot and I will definitely work towards to constant achievement.

❖ Poster



https://github.com/Shaz447/Shazia-CW1.git

❖ Appendices

Problem definition (3-5 lines)

In today's world, gyms are less structured considering the technical advancements. GYM members are less aware of their daily routine/work out time/diet programmes. To help members stay updated with all the recent information such as addition of new equipment's.

Project description and objectives (2-3 paragraphs)

As we know, in this modern world, how important it is to maintain good health when it comes to strengthening immunity. This application is considerably helpful for fitness freaks which will provide them with their personal daily data inclusive of diet plans, workout regime, or use of gym equipment's. The Application would allow gym members to choose various plans of membership which in return will help them monitor track of their fitness.

Objective – The main purpose of this application is to make people aware of all the facilities gym 's can provide. It gives them freedom to opt for a plan required during various phases. The application creates a unique ID called as Member ID which stores all the information of the respective member. MySQL is used to store data in the database wherein Netbeans 8.0 is used to develop the application. Gym members can now have the exact information for their past and future gym regimes.

Special features of Gym Management system:-

1. **Gym Members are required a login Id and password after registration.**
2. **Members can go through the updated diet and exercise plans every day.**
3. **All the updating and deletion can only be done by admin side.**
4. **Due to the better GUI changes can be done easily.**
5. **Members or users can check and pay the fees and check outstanding balance.**
6. **Members are not allowed to make changes and any updating in application.**
7. **Members can suggest the Admin to make some specific changes as the feedback.**
8. **This app helps to reduce the complexity and helps to stop deforestation by saving tons of papers which are still used by many organisations.**

Required HW/SW

Technology used –Java SE(standard edition) Net beans 8.0

Structured query Language(SQ)L server for database

❖ Reference

- *www.wikipedia.com*
- *www.tutorialspoint.com*
- *https://www.apachefriends.org/download.html*
- *www.w3schools.com*
- *http://www.slideshare.net/jagaarj/database-design-normalization*
- *www.oracle.com*
- *www.slideshare.com*
- *https://www.w3schools.in/java*
- *https://en.wikipedia.org/wiki/Java_(programming_language*
- *https://www.childline.org.uk/info-advice/you-your-body/my-body/staying-healthy/*
- *https://www.itgovernance.eu/blog/en/the-gdpr-what-exactly-is-personal-data*