

Assignment No:-61

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Gym Management System Project Description (Member Management Module) Using JDBC
The Gym Management System's Member Management Module is a Java-based application designed to handle all aspects of member-related activities within a gym or fitness center. This module focuses on efficiently managing member data, membership plans, using JDBC (Java Database Connectivity) for seamless interaction with a relational database.

- 1.Admin should add new members.
- 2.admin should view all members data
- 3.admin should update members profile
- 4.admin should delete members.
- 5.admin should search any member using name.

```
package com.gymManagementSystem.assingment61;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;

public class GymManagementSystem
{
    static String ins;
    static String sel;
    static String upd;
    static String del;
    static String ser;
    static PreparedStatement ps;
    static Scanner sc;
    static Connection conn;
    public static Connection isConnected()
```

```

{
    try
    {
        Class.forName("com.mysql.cj.jdbc.Driver");

        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/gymManagmentSystem","root","12345");
        ins="insert into member values(?,?,?,?,?,?,?,?)";
        sel="select * from member";
        upd="update member set first_name=?, last_name=?, age=?, dod=?, email=?, phone_number=?, membership_type=? where member_id=?";
        del="delete from member where first_name=?";
        ser="select * from member where first_name=?";
    }
    catch (Exception e)
    {
        e.printStackTrace();
    }
    return conn;
}

public static void isInserted()
{
    try
    {
        sc = new Scanner(System.in);
        PreparedStatement ps =
isConnected().prepareStatement(ins);
        while(true)
        {
            String ent="Enter Member Id: ";
            String ent1="Enter First Name: ";
            String ent2="Enter Last Name: ";
            String ent3="Enter Your Age: ";
            String ent4="Enter Your Date Of Birth: ";
            String ent5="Enter Your Email: ";
            String ent6="Enter Your Phone Number: ";
            String ent7="Enter Your Membership: ";
            for(int i=0;i<ent.length();i++)
            {
                System.out.print(ent.charAt(i));
                Thread.sleep(50);
            }
            int mid=sc.nextInt();
            ps.setInt(1, mid);
            System.out.println("\n");
        }
    }
}

```

```
for(int i=0;i<ent1.length();i++)
{
    System.out.print(ent1.charAt(i));
    Thread.sleep(50);
}
String fn=sc.next();
ps.setString(2, fn);
System.out.println("\n");

for(int i=0;i<ent2.length();i++)
{
    System.out.print(ent2.charAt(i));
    Thread.sleep(50);
}
String ln=sc.next();
ps.setString(3, ln);
System.out.println("\n");

for(int i=0;i<ent3.length();i++)
{
    System.out.print(ent3.charAt(i));
    Thread.sleep(50);
}
int age=sc.nextInt();
ps.setInt(4, age);
System.out.println("\n");

for(int i=0;i<ent4.length();i++)
{
    System.out.print(ent4.charAt(i));
    Thread.sleep(50);
}
String dob=sc.next();
ps.setString(5, dob);
System.out.println("\n");

for(int i=0;i<ent5.length();i++)
{
    System.out.print(ent5.charAt(i));
    Thread.sleep(50);
}
String em=sc.next();
ps.setString(6, em);
System.out.println("\n");

for(int i=0;i<ent6.length();i++)
```

```

        {
            System.out.print(ent6.charAt(i));
            Thread.sleep(50);
        }
        String pn=sc.next();
        ps.setString(7, pn);
        System.out.println("\n");

        for(int i=0;i<ent7.length();i++)
        {
            System.out.print(ent7.charAt(i));
            Thread.sleep(50);
        }
        String mt=sc.next();
        ps.setString(8, mt);
        System.out.println("\n");

        ps.addBatch();

        System.out.println("Do you want to conitue
press yes(y) or No (n) : ");
        System.out.println("-----
-----");
        char c = sc.next().charAt(0);
        if(c=='n')
            break;
    }
    ps.executeBatch();

    System.out.println("*****");
    System.out.println();
    System.out.println("Data inserted
successfully....");
    System.out.println();

    System.out.println("*****");

    }
    catch (Exception e)
    {
        e.printStackTrace();
    }
}
public static void viewMember()
{
    try
    {

```

```

        System.out.println("*****");
        System.out.println();
        ps = isConnected().prepareStatement(sel);
        ResultSet rs = ps.executeQuery();
        System.out.println("+-----+-----+-----+-----+-----+");
        -----+-----+-----+-----+-----+
        -----+-----+-----+-----+-----+");
        System.out.println("| Memeber_id      |
First_Name      | Last_Name      | Age      | Date Of
Birth      | Emial      | Phone_Number      |
Membership_Type |");
        System.out.println("+-----+-----+-----+-----+-----+");
        -----+-----+-----+-----+-----+
        -----+-----+-----+-----+-----+");
        while(rs.next())
        {
            System.out.println("|      "+rs.getInt(1)+"
|"+rs.getString(2)+"      | "+rs.getString(3)+"      |
"+rs.getInt(4)+"      | "+rs.getDate(5)+"      |
"+rs.getString(6)+"      | "+rs.getString(7)+"      |
"+rs.getString(8)+"      |");
            System.out.println("+-----+-----+-----+-----+-----+");
            -----+-----+-----+-----+-----+
            -----+-----+-----+-----+-----+");
        }
        System.out.println();

        System.out.println("*****");
    }
    catch (Exception e)
    {
        e.printStackTrace();
    }
}

public static void updateMember()
{
    try
    {
        sc = new Scanner(System.in);
        System.out.println("Enter your choice:\n"
            + "1. Change first name\n"
            + "2. Change last name\n"
            + "3. Change age\n"
            + "4. Change date of birth\n"
            + "5. Change email\n"

```

```

        + "6. Change phone number\n"
        + "7. Change membership\n"
        + "-----\n");
int ch = sc.nextInt();

String column = null;
String stringValue = null;
Integer intValue = null;

switch (ch)
{
    case 1:
        System.out.println("Enter First_Name: ");
        column = "first_name";
        stringValue = sc.next();
        break;
    case 2:
        System.out.println("Enter Last_Name: ");
        column = "last_name";
        stringValue = sc.next();
        break;
    case 3:
        System.out.println("Enter Your Age: ");
        column = "age";
        intValue = sc.nextInt();
        break;
    case 4:
        System.out.println("Enter date of birth:
");
        column = "dob";
        stringValue = sc.next();
        break;
    case 5:
        System.out.println("Enter Your Email: ");
        column = "email";
        stringValue = sc.next();
        break;
    case 6:
        System.out.println("Enter Your Phone
Number: ");
        column = "phone_number";
        stringValue = sc.next();
        break;
    case 7:
        System.out.println("Enter Your Membership
Type: ");
        column = "membership_type";

```

```

        stringValue = sc.next();
        break;
    default:
        System.out.println("Invalid choice.");
        return;
    }

    System.out.println("Enter Member Id: ");
    int mid = sc.nextInt();

    String updateQuery = "UPDATE member SET " + column
+ " = ? WHERE member_id = ?";
    ps = isConnected().prepareStatement(updateQuery);

    if (intValue != null)
    {
        ps.setInt(1, intValue);
    }
    else
    {
        ps.setString(1, stringValue);
    }
    ps.setInt(2, mid);

    ps.executeUpdate();

    System.out.println("*****");
    System.out.println("Update successful...");

    System.out.println("*****");
}
catch (Exception e)
{
    e.printStackTrace();
}

}

public static void deleteMember()
{
    try
    {
        sc = new Scanner(System.in);
        ps = isConnected().prepareStatement(del);
        System.out.println("Enter Your First Name : ");
        String fna = sc.next();
        ps.setString(1, fna);
    }
}

```

```

System.out.println("*****");
    System.out.println();
    System.out.println("deleted successfull...");
    ps.executeUpdate();
    System.out.println();

System.out.println("*****");
    }
    catch (Exception e)
    {
        e.printStackTrace();
    }
}

public static void searchMember()
{
    try
    {
        sc = new Scanner(System.in);

System.out.println("*****");
        System.out.println();
        ps = isConnected().prepareStatement(ser);
        System.out.println("Enter your First_Name: ");
        String fname=sc.next();
        ps.setString(1, fname);
        ResultSet rs = ps.executeQuery();
        System.out.println("+-----+-----+-----+-----+");
        +-----+-----+-----+-----+-----+-----+-----+-----+-----+";
        System.out.println("| Memeber_id      |
First_Name      | Last_Name      | Age      | Date Of
Birth      | Emial      | Phone_Number      |
Membership_Type |");
        System.out.println("+-----+-----+-----+-----+");
        +-----+-----+-----+-----+-----+-----+-----+-----+-----+";
        while(rs.next())
        {
            System.out.println("|      "+rs.getInt(1)+"
|"+rs.getString(2)+"      | "+rs.getString(3)+"      |
"+rs.getInt(4)+"      | "+rs.getDate(5)+"      |
"+rs.getString(6)+"      | "+rs.getString(7)+"      |
"+rs.getString(8)+"      |");

```



```

        System.out.println("+-----+-----+-----+");
        }
        System.out.println();

        System.out.println("*****");
    }
    catch (Exception e)
    {
        e.printStackTrace();
    }
}

public static void main(String[] args)
{
    try
    {
        isConnected();
        String choice="Enter Choice Below:1,2,3,4,5,6";
        String insert="1.Add New Memebers...";
        String fetch="2.View All Memebers Data...";
        String update="3.Update Members Profile...";
        String delete="4.Delete Members Data...";
        String search="5.Search Any Member Using
Name...";

        String terminate="6.Terminate Operation...";
        sc = new Scanner(System.in);
        int ch=-1;
        while(ch!=0)
        {
            for(int i=0;i<choice.length();i++)
            {
                System.out.print(choice.charAt(i));
                Thread.sleep(200);
            }
            System.out.println("\n");
            for(int i=0;i<insert.length();i++)
            {
                System.out.print(insert.charAt(i));
                Thread.sleep(50);
            }
            System.out.println("\n");
            for(int i=0;i<fetch.length();i++)
            {
                System.out.print(fetch.charAt(i));
                Thread.sleep(50);
            }
        }
    }
}

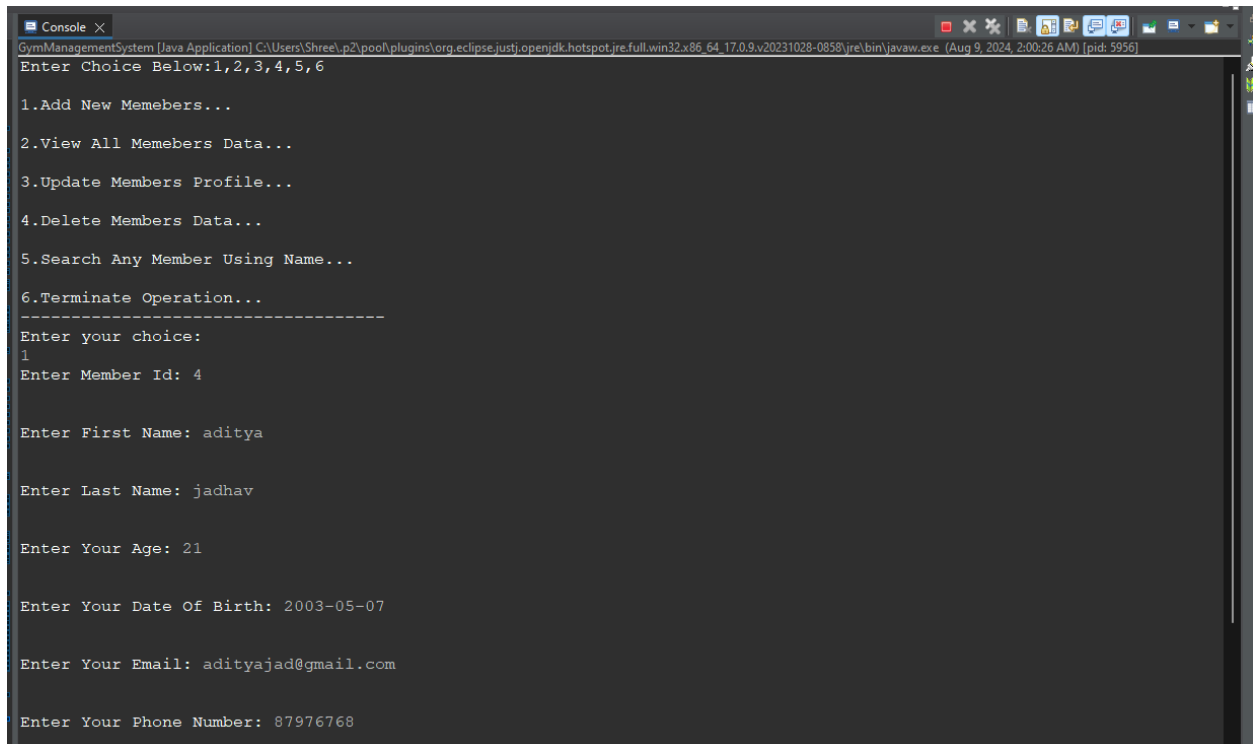
```

```

        System.out.println("\n");
        for(int i=0;i<update.length();i++)
        {
            System.out.print(update.charAt(i));
            Thread.sleep(50);
        }
        System.out.println("\n");
        for(int i=0;i<delete.length();i++)
        {
            System.out.print(delete.charAt(i));
            Thread.sleep(50);
        }
        System.out.println("\n");
        for(int i=0;i<search.length();i++)
        {
            System.out.print(search.charAt(i));
            Thread.sleep(50);
        }
        System.out.println("\n");
        for(int i=0;i<terminate.length();i++)
        {
            System.out.print(terminate.charAt(i));
            Thread.sleep(50);
        }
        System.out.println("\n-----");
        -----");
        System.out.println("Enter your choice: ");
        ch=sc.nextInt();
        switch(ch)
        {
            case 1: isInserted();
                    break;
            case 2: viewMember();
                    break;
            case 3: updateMember();
                    break;
            case 4: deleteMember();
                    break;
            case 5: searchMember();
                    break;
            case 6: ch=0;
                    System.out.println("Terminated...!");
                    break;
        }
    }
}

```

```
        catch(Exception e)
        {
            e.printStackTrace();
        }
        finally
        {
            try {
                isConnected().close();
            } catch (SQLException e) {
                // TODO Auto-generated catch block
                e.printStackTrace();
            }
        }
    }
}
```



The screenshot shows a Java application window titled "GymManagementSystem [Java Application]". The console displays a menu with six options: 1. Add New Memebers..., 2. View All Memebers Data..., 3. Update Members Profile..., 4. Delete Members Data..., 5. Search Any Member Using Name..., and 6. Terminate Operation... The user has entered choice 1. Subsequent prompts for Member Id, First Name, Last Name, Age, Date Of Birth, Email, and Phone Number are shown with the following inputs: 4, aditya, jadhav, 21, 2003-05-07, adityajad@gmail.com, and 87976768 respectively.

```
Console X
GymManagementSystem [Java Application] C:\Users\Shree\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.9.v20231028-0858\jre\bin\javaw.exe (Aug 9, 2024, 2:00:26 AM) [pid: 5956]
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
1
Enter Member Id: 4

Enter First Name: aditya

Enter Last Name: jadhav

Enter Your Age: 21

Enter Your Date Of Birth: 2003-05-07

Enter Your Email: adityajad@gmail.com

Enter Your Phone Number: 87976768
```

Enter Your Email: adityajad@gmail.com

Enter Your Phone Number: 87976768

Enter Your Membership: premium

Do you want to conitue press yes(y) or No (n) :

n

Data inserted successfully.....

Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...

2.View All Memebers Data...

3.Update Members Profile...

4.Delete Members Data...

5.Search Any Member Using Name...

6.Terminate Operation...

Enter your choice:

6.Terminate Operation...

Enter your choice:

2

Memeber_id	First_Name	Last_Name	Age	Date Of Birth	Emial	Phone_Number	Membership_Type
1	sangram	suryawanshi	56	2003-06-03	sangram@gamil.com	483985484	premium
2	harshad	pawar	22	2002-09-09	harsad@gmail.com	845389484	normal
3	omkar	yadav	34	2009-02-02	omkaryadav@gmail.com	4858458348	premium
4	aditya	jadhav	21	2003-05-07	adityajad@gmail.com	87976768	premium

Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...

2.View All Memebers Data...

3.Update Members Profile...

4.Delete Members Data...

5.Search Any Member Using Name...

6.Terminate Operation...

Enter your choice:

```
*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
3
Enter your choice:
1. Change first name
2. Change last name
3. Change age
4. Change date of birth
5. Change email
6. Change phone number
7. Change membership
-----

2
Enter Last_Name:
yadavomi
Enter Member Id:
3
*****
Update successful...
*****
```

```
3
*****
Update successful...
*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
2
*****
+-----+-----+-----+-----+-----+-----+-----+-----+
| Memeber_id | First_Name | Last_Name | Age | Date Of Birth | Emial | Phone_Number | Membership_Type |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | sangram | suryawanshi | 56 | 2003-06-03 | sangram@gamil.com | 483985484 | premium |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | harshad | pawar | 22 | 2002-09-09 | harsad@gmail.com | 845389484 | normal |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | omkar | yadavomi | 34 | 2009-02-02 | omkaryadav@gmail.com | 4858458348 | premium |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 4 | aditya | jadhav | 21 | 2003-05-07 | adityajad@gmail.com | 87976768 | premium |
+-----+-----+-----+-----+-----+-----+-----+-----+
*****
```

```
-----
*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
4
Enter Your First Name :
aditya
*****
deleted successfull...
*****
Enter Choice Below:1,2,3,4,5,6
```

```

*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
2
*****

```

Memeber_id	First_Name	Last_Name	Age	Date Of Birth	Emial	Phone_Number	Membership_Type
1	sangram	suryawanshi	56	2003-06-03	sangram@gamil.com	483985484	premium
2	harshad	pawar	22	2002-09-09	harsad@gmail.com	845389484	normal
3	cmkar	yadavomi	34	2009-02-02	cmkaryadav@gmail.com	4858458348	premium

```

*****

```

```

*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
5
*****

```

Enter your First_Name:
sangram

Memeber_id	First_Name	Last_Name	Age	Date Of Birth	Emial	Phone_Number	Membership_Type
1	sangram	suryawanshi	56	2003-06-03	sangram@gamil.com	483985484	premium

```

*****

```

GymManagementSystem.java | IdcMiniProject.java | Console X

<terminated> GymManagementSystem [Java Application] C:\Users\Shree\p2\poof\plugins\org.eclipse.jdt.openjdk.hotspot.jre.full.win32.x86_64.17.0.9.v20231029-0859\jre\bin\javaw.exe (Aug 9, 2024, 2:00:26 AM - 2:07:33 AM) [pid: 5956]

```

5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
5
*****

```

Enter your First_Name:
sangram

Memeber_id	First_Name	Last_Name	Age	Date Of Birth	Emial	Phone_Number	Membership_Type
1	sangram	suryawanshi	56	2003-06-03	sangram@gamil.com	483985484	premium

```

*****
Enter Choice Below:1,2,3,4,5,6

1.Add New Memebers...
2.View All Memebers Data...
3.Update Members Profile...
4.Delete Members Data...
5.Search Any Member Using Name...
6.Terminate Operation...
-----
Enter your choice:
6
Terminated...!

```