JAVA AWT BASEDHOCKEY CLUB EVENTS ACTIVITY TRACKER - SQL CONNECTIVITY USING JDBC

A Mini Project Report

Submitted in partial fulfilment of the Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

TASNEEM BEGUM (1602-18-737-112)

UNDER THE GUIDANCE OF B.LEELAVATHY



Department of Information Technology

Vasavi College of Engineering (Autonomous)

(Affiliated to Osmania University)

Ibrahim Bagh, Hyderabad-31

2020

BONAFIDE CERTIFICATE

This is to Certify that the project report titled "HOCKEY CLUB EVENTS ACTIVITY TRACKER" project work of Miss. TASNEEM BEGUM bearing Roll.no:1602-18-737-112 who carried out this project under my supervision in the IV semester for the academic year 2019-2020.

<u>Signature</u>

Signature

External examine

Internal examine

ABSTRACT

A sports club will organize several events with different player's participation in the events, on different dates and at different locations. They need to maintain record of all this events and different players participated.

This database project helps to keep the record of hockey club events and participations of players in those events. A new user can easily track the store details of different events conducted at different locations and players participated it that events by entering his/her details into the database.

a) Aim and Priority of the project:

To create a **Java GUI based "Hockey Club Event Activity Tracker"** which has the entities like: Admin, Events and Player whose values are taken from the user. These values are to be inserted, updated and deleted in the database using **JDBC connectivity.**

Introduction:

The purpose of this project is to provide an easy to use application for storing various activity of a club with consistence and later track them with ease. For an admin using this application has to enter his/her admin_id and directly can insert, update or delete any record without any ambiguity. Later, user can track events effectively as the application works efficiently.

b) Requirements:

Tables required-5

TABLE NAME	ATTRIBUTES	DOMAIN		
Admin	i)u_id	number(5)		
	ii)fname	varchar2(20)		
	iii)lname	varchar2(20)		
Events	i)e_id	number(5)		
	ii)location	varchar2(20)		
	iii)e_date	DATE		
Tracks	i)u_id	number(5)		
	ii)e_id	number (5)		
	iii)time	varchar2(20)		
Player	i)p_id	number (5)		
	ii)fname	varchar2(20)		
	iii)lname	varchar2(20)		
	iv)position	varchar2(20)		
	v)rank	number (5)		
Participate	i)e_id	number (5)		
	ii)p_id	number (5)		

TASNEEM BEGUM

ROLL NO: 1602-18-737-112

c) Architecture and Technology:

Software used:

- i. Java Eclipse
- ii. Oracle 11g Database Enterprise Edition Release 11.2.0.1.0-64 bitSQL*Plus Release 9.0.1.3.0.

Java AWT:

Java AWT (Abstract Window Toolkit) is an API to develop GUI or window-based applications in java.

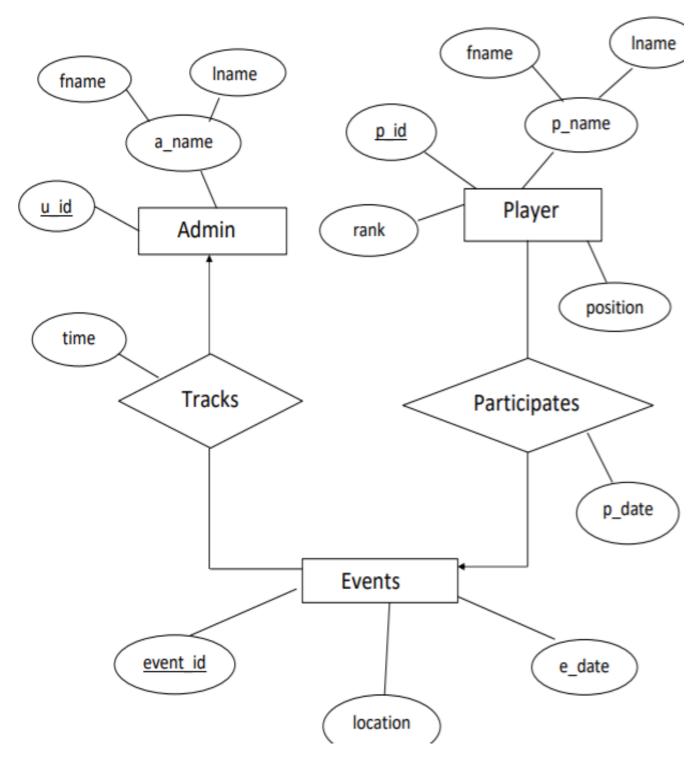
Java AWT components are platform-dependent i.e. components are displayed according to the view of operating system. AWT is heavyweight i.e. its components are using the resources of OS. The java.awt package provides classes such as TextField, Label, TextArea, Button, Choice, List ,etc.

SQL:

Structure Query Language (SQL) is a database query language used for storing and managing data in Relational DBMS. SQL was the first commercial language introduced for E.F Codd's Relational model of database. Today almost all RDBMS (MySql, Oracle, Infomix, Sybase, MS Access) use SQL as the standard database query language. SQL is used to perform all types of data operations in RDBMS.

d) Design:

i) Entity Relationship Model:



ii)Database Design:

Creation of tables using DDL commands as follows:

1. Admin Table:

2.Event Table:

3. Tracks Relationship Table:

4. Player Table:

```
SQL> create table player(
2 p_id number(5) primary key,
3 pfname varchar2(20),
4 plname varchar2(20),
      position varchar2(20),
      rank number(5));
Table created.
SQL> desc player;
 Name
                                                                      Nu11?
                                                                                    Type
                                                                     NOT NULL NUMBER(5)
VARCHAR2(20)
VARCHAR2(20)
VARCHAR2(20)
 P_ID
 PFNAME
 PLNAME
 POSITION
 RANK
                                                                                    NUMBER(5)
SQL>
```

5. Participation Relationship Table:

```
SQL> create table participate(
2 e_id number(5),
3 p_id number(5),
4 date DATE);
date DATE>

SQL> alter table participate add foreign key(e_id) references events;
```

Fable altered.

SQL> alter table participate add foreign key(e_id> references events;

SQL> alter table participate add foreign key(p_id> references player;

Fable altered.

SQL> alter table participate add primary key(e_id,p_id>;

Fable altered.

Inserting records using DML operation:

1.Admin Table:

```
SQL> insert into admin values(101,'Bihar','11-FEB-2020');
1 row created.
```

```
SQL> select * from admin;

U_ID FNAME LNAME

1 Varsha Kumari
2 sri raj
3 sana fatima
4 abdul wahed
5 abdul majed
```

2.Events Table:

3. Tracks Relationship Table:

4. Player Table:

SQL> select	* from player;		
P_I D	PFNAME	PLNAME	POSITION
RANK			
17 1	Dhyan	Chand	forwards
28 7	Dhanraj	Pillay	midfields
36 15	Udhan	Singh	goalie
P_I D	PFNAME	PLNAME	POSITION
RANK			
50 5	Luslie	Claudis	fullbacks
73 2	Mo hammmed	Shahid	fullbacks
SQL>			

5. Participation Relationship Table:

e) Implementation

i) Front end programs and connectivity

//CONNECTIVITY PROGRAM:

Thus, the connection from Java to Oracle database is performed and therefore, can be used for inserting, updating and deleting tables in the database directly.

Programs:

1.Inserting in Admin Table:

ROLL NO: 1602-18-737-112

```
catch (Exception e)
                      System. err. println("Unable to find and load driver");
                      System.exit(1);
               connectToDB();
       }
       public void connectToDB()
    {
              try
                 connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:tasneem","tasneem")
;
                statement = connection.createStatement();
              }
              catch (SQLException connectException)
               {
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
    }
       public void buildGUI()
              insertAdminButton = new Button("Insert Admin");
              insertAdminButton.addActionListener(new ActionListener()
                      public void actionPerformed(ActionEvent e)
                             try
                               String query= "INSERT INTO admin VALUES(" +
u idText.getText() + ", " + "'" + fnameText.getText() + "'" + ","+"'"+lnameText.getText()
+"'"+ ")";
                               int i = statement.executeUpdate(query);
                               errorText.append("\nInserted " + i + " rows successfully");
                             catch (SQLException insertException)
                               displaySQLErrors(insertException);
                               JOptionPane.showMessageDialog(null, "Input is in wrong
format.", "Error Message", JOptionPane. ERROR_MESSAGE);
                      }
              });
              u idText = new TextField(15);
              fnameText = new TextField(15);
              lnameText = new TextField(15);
              errorText = new TextArea(10, 40);
              errorText.setEditable(false);
              Panel first = new Panel();
              first.setLayout(new GridLayout(4, 2));
              first.add(new Label("Admin/User ID:"));
              first.add(u_idText);
              first.add(new Label("First Name:"));
              first.add(fnameText);
```

```
first.add(new Label("Last Name:"));
              first.add(lnameText);
              first.setBounds(125,90,200,100);
              Panel second = new Panel(new GridLayout(4, 1));
               second.add(insertAdminButton);
        second.setBounds(125,220,150,100);
              Panel third = new Panel();
              third.add(errorText);
              third.setBounds(125,320,300,200);
              setLayout(null);
              add(first);
              add(second);
              add(third);
              setTitle("New Admin Creation");
              setSize(500, 600);
              setVisible(true);
       }
       private void displaySQLErrors(SQLException e)
               errorText.append("\nSQLException: " + e.getMessage() + "\n");
               errorText.append("SQLState: " + e.getSQLState() + "\n");
              errorText.append("VendorError: " + e.getErrorCode() + "\n");
       }
       public static void main(String[] args)
               InsertAdmin sail = new InsertAdmin();
               sail.addWindowListener(new WindowAdapter(){
                 public void windowClosing(WindowEvent e)
                 {
                      System.exit(0);
                 }
              });
               sail.buildGUI();
       }
}
2. Updating Admin Table:
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import javax.swing.JOptionPane;
public class UpdateAdmin extends Frame
{
       Button updateAdminButton;
       List adminIDList;
       TextField u_idText, fnameText, lnameText;
       TextArea errorText;
       Connection connection;
       Statement statement;
       ResultSet rs;
TASNEEM BEGUM
ROLL NO: 1602-18-737-112
```

```
public UpdateAdmin()
              try
               {
                      Class.forName("oracle.jdbc.driver.OracleDriver");
              catch (Exception e)
               {
                      System.err.println("Unable to find and load driver");
                      System.exit(1);
              connectToDB();
       }
       public void connectToDB()
    {
              trv
                 connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:tasneem","tasneem")
                statement = connection.createStatement();
              catch (SQLException connectException)
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
    }
       private void loadAdmin()
              try
                rs = statement.executeQuery("SELECT u id FROM admin");
                while (rs.next())
                {
                      adminIDList.add(rs.getString("u id"));
                }
              }
              catch (SQLException e)
                displaySQLErrors(e);
              }
       }
       public void buildGUI()
           adminIDList = new List(10);
              loadAdmin();
              add(adminIDList);
              adminIDList.addItemListener(new ItemListener()
               {
                      public void itemStateChanged(ItemEvent e)
                             try
                             {
                                     rs = statement.executeQuery("SELECT * FROM admin where
u id ="+adminIDList.getSelectedItem());
                                     rs.next();
```

```
u_idText.setText(rs.getString("u_id"));
                                     fnameText.setText(rs.getString("fname"));
                                     lnameText.setText(rs.getString("lname"));
                              catch (SQLException selectException)
                              {
                                     displaySQLErrors(selectException);
                              }
                      }
              });
              updateAdminButton = new Button("Update admin");
              updateAdminButton.addActionListener(new ActionListener()
                      public void actionPerformed(ActionEvent e)
                              trv
                              {
                                     Statement statement = connection.createStatement();
                                     int i = statement.executeUpdate("UPDATE admin "
                                     + "SET fname='" + fnameText.getText() + "', "
                                     + "lname='" + lnameText.getText() +
                                     + " WHERE u_id = "
                                     + adminIDList.getSelectedItem());
                                     errorText.append("\nUpdated " + i + " rows
successfully");
                                     adminIDList.removeAll();
                                     loadAdmin();
                              catch (SQLException insertException)
                                     displaySQLErrors(insertException);
                                       JOptionPane.showMessageDialog(null, "Input is in
wrong format.", "Error Message", JOptionPane. ERROR_MESSAGE);
                      }
              });
               u idText = new TextField(15);
               fnameText = new TextField(15);
              lnameText = new TextField(15);
              errorText = new TextArea(10, 40);
              errorText.setEditable(false);
              Panel first = new Panel();
              first.setLayout(new GridLayout(4, 2));
              first.add(new Label("Admin/User ID:"));
              first.add(u_idText);
              first.add(new Label("First Name:"));
              first.add(fnameText);
              first.add(new Label("Last Name:"));
              first.add(lnameText);
              Panel second = new Panel(new GridLayout(4, 1));
              second.add(updateAdminButton);
              Panel third = new Panel();
              third.add(errorText);
              add(first);
              add(second);
              add(third);
               setTitle("Update Admin");
```

```
setSize(500, 600);
               setLayout(new FlowLayout());
               setVisible(true);
       }
       private void displaySQLErrors(SQLException e)
               errorText.append("\nSQLException: " + e.getMessage() + "\n");
               errorText.append("SQLState: " + e.getSQLState() + "\n");
               errorText.append("VendorError: " + e.getErrorCode() + "\n");
       }
       public static void main(String[] args)
               UpdateAdmin ups = new UpdateAdmin();
               ups.addWindowListener(new WindowAdapter(){
                 public void windowClosing(WindowEvent e)
                 {
                      System.exit(0);
                 }
              });
               ups.buildGUI();
       }
}
3. Deleting Admin Table:
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
public class DeleteAdmin extends Frame
{
       Button deleteAdminButton;
       List adminIDList;
       TextField u_idText, fnameText, lnameText;
       TextArea errorText;
       Connection connection;
       Statement statement;
       ResultSet rs;
       public DeleteAdmin()
               try
               {
                      Class.forName("oracle.jdbc.driver.OracleDriver");
               catch (Exception e)
                      System.err.println("Unable to find and load driver");
                      System.exit(1);
               connectToDB();
       }
       public void connectToDB()
    {
               try
               {
                 connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:tasneem","tasneem")
TASNEEM BEGUM
ROLL NO: 1602-18-737-112
```

```
statement = connection.createStatement();
              }
              catch (SQLException connectException)
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                 System.exit(1);
              }
    }
       private void loadAdmin()
              try
               {
                rs = statement.executeQuery("SELECT * FROM admin");
                while (rs.next())
                 {
                      adminIDList.add(rs.getString("u_id"));
                }
              }
              catch (SQLException e)
                displaySQLErrors(e);
       }
       public void buildGUI()
           adminIDList = new List(10);
              loadAdmin();
              add(adminIDList);
              adminIDList.addItemListener(new ItemListener()
               {
                      public void itemStateChanged(ItemEvent e)
                             try
                              {
                                     rs = statement.executeQuery("SELECT * FROM admin");
                                     while (rs.next())
(rs.getString("u_id").equals(adminIDList.getSelectedItem()))
                                            break;
                                     if (!rs.isAfterLast())
                                     {
                                            u_idText.setText(rs.getString("u_id"));
                                            fnameText.setText(rs.getString("fname"));
                                            lnameText.setText(rs.getString("lname"));
                                     }
                              catch (SQLException selectException)
                              {
                                     displaySQLErrors(selectException);
                              }
                      }
              });
              deleteAdminButton = new Button("Delete Admin");
              deleteAdminButton.addActionListener(new ActionListener()
TASNEEM BEGUM
```

ROLL NO: 1602-18-737-112

```
public void actionPerformed(ActionEvent e)
                             try
                             {
                                     Statement statement = connection.createStatement();
                                     int i = statement.executeUpdate("DELETE FROM admin
WHERE u id = "
                                                   + adminIDList.getSelectedItem());
                                     errorText.append("\nDeleted " + i + " rows
successfully");
                                     u idText.setText(null);
                                     fnameText.setText(null);
                                     lnameText.setText(null);
                                     adminIDList.removeAll();
                                     loadAdmin();
                             }
                             catch (SQLException insertException)
                                     displaySQLErrors(insertException);
                             }
                      }
              });
              u idText = new TextField(15);
              fnameText = new TextField(15);
              lnameText = new TextField(15);
              errorText = new TextArea(10, 40);
              errorText.setEditable(false);
              Panel first = new Panel();
              first.setLayout(new GridLayout(4, 2));
              first.add(new Label("Admin/User ID:"));
              first.add(u_idText);
              first.add(new Label("First Name:"));
              first.add(fnameText);
              first.add(new Label("Last Name:"));
              first.add(lnameText);
              Panel second = new Panel(new GridLayout(4, 1));
              second.add(deleteAdminButton);
              Panel third = new Panel();
              third.add(errorText);
              add(first);
              add(second);
              add(third);
              setTitle("Remove Admin");
              setSize(450, 600);
              setLayout(new FlowLayout());
              setVisible(true);
       }
       private void displaySQLErrors(SQLException e)
              errorText.append("\nSQLException: " + e.getMessage() + "\n");
              errorText.append("SQLState: " + e.getSQLState() + "\n");
              errorText.append("VendorError: " + e.getErrorCode() + "\n");
       }
```

Main Program:

```
import java.awt.*;
import java.awt.event.*;
class HockeyClubEventTracker extends Frame implements ActionListener
{
         String msg = "";
         Label 11,12;
         Frame f;
         InsertAdmin iadmin;
         UpdateAdmin uadmin;
         DeleteAdmin dadmin;
         InsertEvents ievents;
         DeleteEvents devents;
         UpdateEvents uevents;
         InsertPlayer iplayer;
         DeletePlayer dplayer;
         UpdatePlayer uplayer;
         InsertTracks itracks;
         DeleteTracks dtracks;
         UpdateTracks utracks;
         InsertParticipate iparticipate;
         DeleteParticipate dparticipate;
         UpdateParticipate uparticipate;
         HockeyClubEventTracker()
          {
                   11 = new Label("Welcome to");
                   12=new Label("Hockey Club Event Activity Tracker");
                       11.setAlignment(Label.CENTER);
                       12.setAlignment(Label.CENTER);
                       11.setFont(new Font("SansSerif", Font.BOLD, 40));
12.setFont(new Font("SansSerif", Font.BOLD, 50));
                       setLayout(new BorderLayout());
                       add(11,BorderLayout.NORTH);
                       add(12,BorderLayout.CENTER);
                       MenuBar mbar = new MenuBar();
                       setMenuBar(mbar);
                       Menu admin = new Menu("Admin");
                       MenuItem item1, item2, item3;
                       admin.add(item1 = new MenuItem("Insert Admin"));
                       admin.add(item2 = new MenuItem("Update Admin"));
                       admin.add(item3 = new MenuItem("Delete Admin"));
                       mbar.add(admin);
TASNEEM BEGUM
```

ROLL NO: 1602-18-737-112

```
Menu events = new Menu("Events");
            MenuItem item4, item5, item6;
            events.add(item4 = new MenuItem("Insert Events"));
            events.add(item5 = new MenuItem("Update Events"));
            events.add(item6 = new MenuItem("Delete Events"));
            mbar.add(events);
            Menu player = new Menu("Player");
            MenuItem item7, item8, item9;
            player.add(item7 = new MenuItem("Insert Player"));
            player.add(item8 = new MenuItem("Update Player"));
            player.add(item9 = new MenuItem("Delete Player"));
            mbar.add(player);
            Menu tracks= new Menu("Tracks");
            MenuItem item10,item11,item12;
            tracks.add(item10=new MenuItem("Insert Tracks"));
            tracks.add(item11=new MenuItem("Update Tracks"));
            tracks.add(item12=new MenuItem("Delete Tracks"));
            mbar.add(tracks);
            Menu participate=new Menu("Participate");
            MenuItem item13,item14,item15;
            participate.add(item13=new MenuItem("Insert Participate"));
            participate.add(item14=new MenuItem("Update Participate"));
            participate.add(item15=new MenuItem("Delete Participate"));
            mbar.add(participate);
            item1.addActionListener(this);
            item2.addActionListener(this);
            item3.addActionListener(this);
            item4.addActionListener(this);
            item5.addActionListener(this);
            item6.addActionListener(this);
            item7.addActionListener(this);
            item8.addActionListener(this);
            item9.addActionListener(this);
            item10.addActionListener(this);
            item11.addActionListener(this);
            item12.addActionListener(this);
            item13.addActionListener(this);
            item14.addActionListener(this);
            item15.addActionListener(this);
            addWindowListener(new WindowAdapter(){
                    public void windowClosing(WindowEvent we)
                    {
                           System.exit(0);
                    }
            });
            setTitle("Hockey Club Event Activity Tracker ");
            Color clr = new Color(150, 150, 150);
            setBackground(clr);
            setFont(new Font("SansSerif", Font.BOLD, 14));
            setSize(600, 600);
            setVisible(true);
}
public void actionPerformed(ActionEvent ae)
       String arg = ae.getActionCommand();
```

```
if(arg.equals("Insert Admin"))
            iadmin = new InsertAdmin();
            iadmin.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
            {
                   iadmin.dispose();
            });
            iadmin.buildGUI();
}
     else if(arg.equals("Update Admin"))
     {
            uadmin = new UpdateAdmin();
            uadmin.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
        {
                   uadmin.dispose();
            });
            uadmin.buildGUI();
     }
     else if(arg.equals("Delete Admin"))
            dadmin = new DeleteAdmin();
            dadmin.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
            {
                   dadmin.dispose();
            });
            dadmin.buildGUI();
     }
     else if(arg.equals("Insert Events"))
            ievents = new InsertEvents();
            ievents.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
        {
                   ievents.dispose();
            }
            });
            ievents.buildGUI();
     else if(arg.equals("Update Events"))
            uevents = new UpdateEvents();
            uevents.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
            {
                   uevents.dispose();
            });
            uevents.buildGUI();
     else if(arg.equals("Delete Events"))
            devents = new DeleteEvents();
            devents.addWindowListener(new WindowAdapter(){
            public void windowClosing(WindowEvent e)
```

```
devents.dispose();
      });
      devents.buildGUI();
else if(arg.equals("Insert Player"))
      iplayer = new InsertPlayer();
      iplayer.addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent e)
              iplayer.dispose();
      });
      iplayer.buildGUI();
else if(arg.equals("Update Player"))
      uplayer = new UpdatePlayer();
      uplayer.addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent e)
      {
              uplayer.dispose();
      });
      uplayer.buildGUI();
else if(arg.equals("Delete Player"))
      dplayer = new DeletePlayer();
      dplayer.addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent e)
              dplayer.dispose();
      });
      dplayer.buildGUI();
else if(arg.equals("Insert Tracks"))
      itracks = new InsertTracks();
      itracks.addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent e)
      {
              itracks.dispose();
      });
      itracks.buildGUI();
else if(arg.equals("Update Tracks"))
      utracks = new UpdateTracks();
      utracks.addWindowListener(new WindowAdapter(){
      public void windowClosing(WindowEvent e)
      {
             utracks.dispose();
      });
      utracks.buildGUI();
else if(arg.equals("Delete Tracks"))
      dtracks = new DeleteTracks();
      dtracks.addWindowListener(new WindowAdapter(){
```

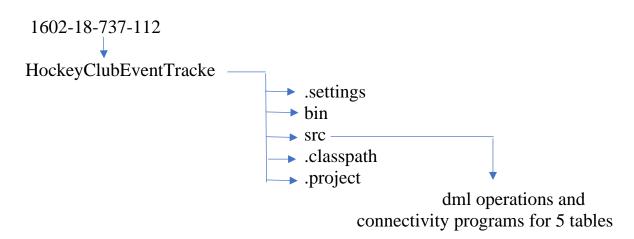
```
public void windowClosing(WindowEvent e)
                              dtracks.dispose();
                      });
                      dtracks.buildGUI();
                else if(arg.equals("Insert Participate"))
                      iparticipate = new InsertParticipate();
                      iparticipate.addWindowListener(new WindowAdapter(){
                      public void windowClosing(WindowEvent e)
                              iparticipate.dispose();
                      });
                      iparticipate.buildGUI();
               else if(arg.equals("Update Participate"))
                      uparticipate = new UpdateParticipate();
                      uparticipate.addWindowListener(new WindowAdapter(){
                      public void windowClosing(WindowEvent e)
                      {
                             uparticipate.dispose();
                      });
                      uparticipate.buildGUI();
                else if(arg.equals("Delete Participate"))
                      dparticipate = new DeleteParticipate();
                      dparticipate.addWindowListener(new WindowAdapter(){
                      public void windowClosing(WindowEvent e)
                              dparticipate.dispose();
                      });
                      dparticipate.buildGUI();
                }
         }
         public static void main(String ... args)
         {
                      new HockeyClubEventTracker();
         }
}
```

ii) GitHub Link and folder structure:

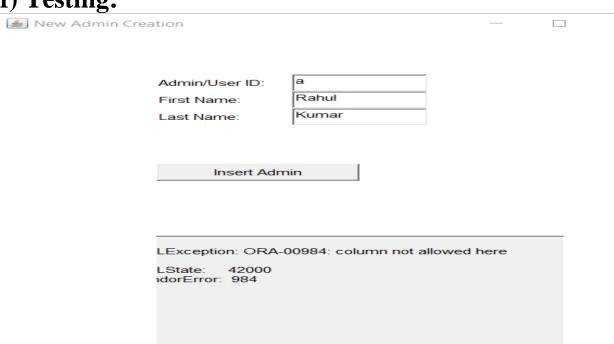
Link-https://github.com/tasneembegum/Tasneem-Begum

Folder Structure:

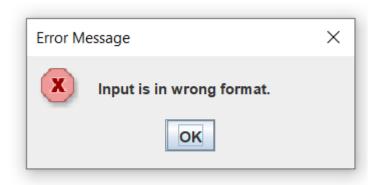
- 1. Hockey Club Event Activity Tracker.pdf
- 2.MiniProjectReport.pdf
- 3.1602-18-737-112.zip



f) Testing:



If incorrect values are entered which mismatch datatypes, the following error pop up box is shown:



RESULTS

Main Program when run displays the following window frame from which all tables can be accessed and different DML operations can be performed:



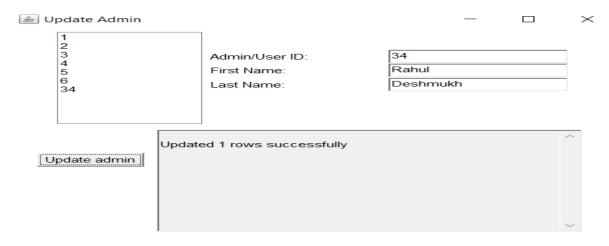


Here are DML operations for Admin Table:

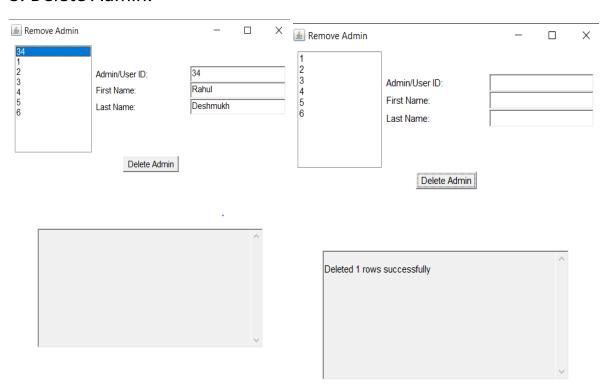
1.Inserting into Admin Table:

<u>≨</u> New Admin Crea	Admin/User ID: First Name: Last Name:		_	×
	Insert Adr	min		

2. Updating Admin Table:



3. Delete Admin:



DISCUSSION & FUTURE WORK:

The application done till now is basically to store and track the details of few events of Hockey Club like different events taken place and players participated in that event. There are various other activities of club that can be stored and tracked, such as- details of company sponsored, different equipment's required, tickets details etc. And hence, for this number of entities and relationship between them will come into picture, which can be converted into first tables using SQL commands and then into GUI program using java code.

REFERENCES

https://www.oracle.com/in/database/technologies/112010-

win64soft.html

https://www.youtube.com/watch?v=fMp63HsIRbc&t=107s