INFORMATICS PRACTICES PROJECT

AIR-AMIGO'S AIRLINE MANAGEMENT SYSTEM

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BOARD ROLL NUMBER:5850335

XII-B

2016-2017

Amity International School, Noida Sector-44 Department of Informatics Practices

<u>Certificate:</u>

This is to certify that **Anant Jain**, a student of class XII-B has successfully completed the project on **"AIRLINE MANAGEMENT SYSTEM"** under the guidance of Mrs Neha Sinha(Subject Teacher) during the year 2016-2017.

THEORY:

This project has been developed to assist as an airline management system. A user can add new records, delete existing records and view existing records for planes, staff and passengers of their company. The project also contains a search option for passenger and staff.

The project has been developed as the airline management system for Air Amigo which is a fictional company.

The project has been made using the help of Netbeans IDE and Mysql.

MYSQL

The password for MySql is "amity" and the user is "root".

CODING FOR Mysql:

Create database project;

Use project;

Create table passenger(Name varchar(20),ID varchar(10),Address varchar(30),Phone varchar(11),DOF varchar(20),PayableAMt varchar(20),FlightNo varchar(20));

Create table planes(Manufacturer_Name varchar(20),Manufacturer_ID varchar(20),Model_NO varchar(10),Passenger_Capacity varchar(10),Date_Of_Addition varchar(20),no_of_engines varchar(10),No_of_Desks varchar(20));

Create table staff(Name varchar(20),ID varchar(10),Address varchar(30),Phone varchar(11),DOJ varchar(10),Salary varchar(20),Department varchar(20));

JAVA-NETBEANS

CODE FOR EXIT BUTTON(THROUGHOUT THE PROJECT):

System.exit(0);

CODE FOR "TO MAIN Page" BUTTON(THROUGHOUT THE PROJECT):

this.setVisible(false);

new MainPage().setVisible(true);

CODE FOR LOGOUT BUTTON(THROUGHOUT THE PROJECT):

this.setVisible(false);

new Login().setVisible(true);

CODE FOR CLEAR BUTTON(THROUGHOUT THE PROJECT):

tf1.setText(null);

tf2.setText(null);

tf3.setText(null);

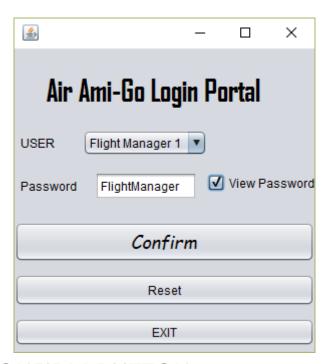
tf4.setText(null);

tf5.setText(null);

tf6.setText(null);

tf7.setText(null);

LOGIN PAGE



CODE FOR CONFIRM BUTTON:

{if

 $((jcb.getSelectedIndex()==3)||(jcb.getSelectedIndex()==1)||(jcb.getSelectedIndex()==2)) \\ \{String \ p = new \ String(jp1.getPassword()); \}$

```
if(((jcb.getSelectedIndex()==3)||(jcb.getSelectedIndex()==1)||(jcb.getSelectedIndex()==2))|
&&p.equals("FlightManager"))
     { JOptionPane.showMessageDialog(null,"Congratulations, You have entered the right
password!");
       this.setVisible(false);
       new MainPage().setVisible(true);}
     else JOptionPane.showMessageDialog(this,"Incorrect password for selected user");
     {if (jcb.getSelectedIndex()==4)
     {String p = new String(jp1.getPassword());
     if((jcb.getSelectedIndex()==4)&&p.equals("GrStaff1"))
     { JOptionPane.showMessageDialog(null,"Congratulations, You have entered the right
password!");
       this.setVisible(false);
       new MainPage().setVisible(true);}
     else JOptionPane.showMessageDialog(this,"Incorrect password for selected user");
     {if (jcb.getSelectedIndex()==5)
     {String p = new String(jp1.getPassword());
     if((jcb.getSelectedIndex()==5)&&p.equals("GrStaff2"))
     { JOptionPane.showMessageDialog(null,"Congratulations, You have entered the right
password!");
       this.setVisible(false);
       new MainPage().setVisible(true);}
     else JOptionPane.showMessageDialog(this,"Incorrect password for selected user");
    }}}
     {if (jcb.getSelectedIndex()==0)
     {String p = new String(jp1.getPassword());
     if((jcb.getSelectedIndex()==0))
     { JOptionPane.showMessageDialog(null,"Please select a user");}
    }}
CODE FOR SELECT USER COMBOBOX:
if ((jcb.getSelectedIndex()==3)||(jcb.getSelectedIndex()==1)||(jcb.getSelectedIndex()==2))
{ip1.setText("FlightManager");}
if (jcb.getSelectedIndex()==4)
{jp1.setText("GrStaff1");}
if (jcb.getSelectedIndex()==5)
{jp1.setText("GrStaff2");}
CODE FOR VIEW PASSWORD CHECK BOX:
if (jcb1.isSelected())
{ jp1.setEchoChar((char)0);}
else
{jp1.setEchoChar('*');}
```



MAIN USER PAGE



CODE FOR Add New Records BUTTON:

new Add().setVisible(true);

CODE FOR Remove Existing Records BUTTON:

new Remove().setVisible(true);

CODE FOR View Records BUTTON:

new Record().setVisible(true);

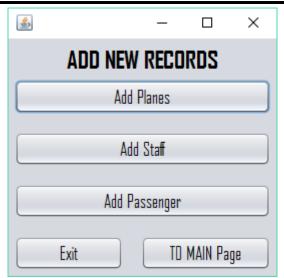
CODE FOR Search Records BUTTON:

new Search().setVisible(true);

CODE FOR About BUTTON:

new About().setVisible(true);

ADDING NEW RECORDS:



CODE FOR ADD Planes Button:

this.setVisible(false);

new Add_Planes().setVisible(true);

CODE FOR ADD Staff Button:

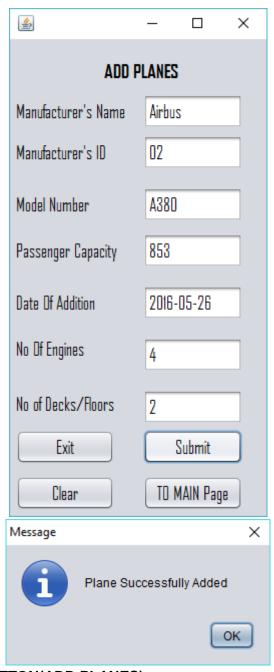
this.setVisible(false);

new Add_Staff().setVisible(true);

CODE FOR ADD Passenger Button:

this.setVisible(false);

new Add_Passenger().setVisible(true);

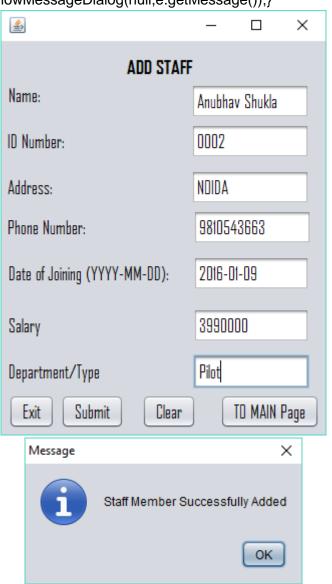


CODE FOR SUBMIT BUTTON(ADD PLANES):

```
String mna=tf1.getText();
String mid=tf2.getText();
String mn=tf3.getText();
String pc=tf4.getText();
String doa=tf5.getText();
String noe=tf6.getText();
String nod=tf7.getText();
try
{Class.forName("java.sql.DriverManager");
Connection
```

con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root"," amity");

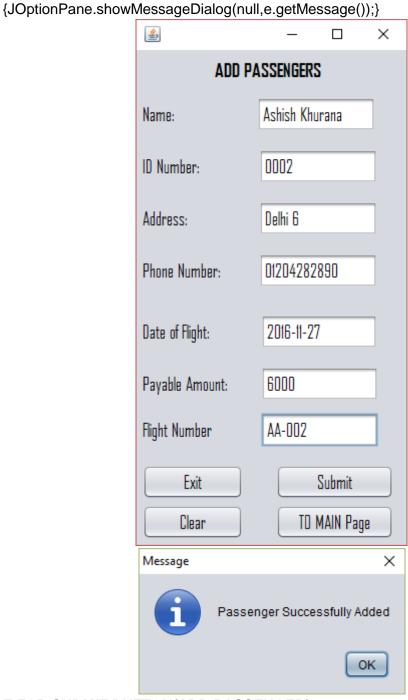
```
Statement stmt=(Statement)con.createStatement();
String q1="insert into planes
values('"+mna+"','"+mid+"','"+mn+"','"+pc+"','"+doa+"','"+noe+"','"+nod+"');";
stmt.executeUpdate(q1);
JOptionPane.showMessageDialog(this,"Plane Successfully Added");
}
catch(Exception e)
{JOptionPane.showMessageDialog(null,e.getMessage());}
```



CODE FOR SUBMIT BUTTON(ADD STAFF):

```
String name=tf1.getText();
String Id=tf2.getText();
String add=tf3.getText();
String pn=tf4.getText();
String doj=tf5.getText();
String sal=tf6.getText();
String dep=tf7.getText();
try
{Class.forName("java.sql.DriverManager");
```

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root"," amity"); Statement stmt=(Statement)con.createStatement(); String q1="insert into staff values(""+name+"",""+ld+"",""+add+"",""+pn+"",""+doj+"",""+sal+"",""+dep+"");"; stmt.executeUpdate(q1); JOptionPane.showMessageDialog(this,"Staff Member Successfully Added"); } catch(Exception e)

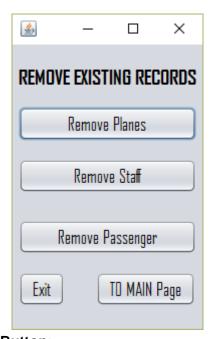


CODE FOR SUBMIT BUTTON(ADD PASSENGER):

String name=tf1.getText();

```
String Id=tf2.getText();
     String add=tf3.getText();
     String pn=tf4.getText();
     String dof=tf5.getText();
     String pa=tf6.getText();
     String fn=tf7.getText();
    try
    {Class.forName("java.sql.DriverManager");
       Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1="insert into passenger
values(""+name+"',""+ld+"',""+add+"',""+pn+"',""+dof+"',""+pa+"',""+fn+"');";
       stmt.executeUpdate(q1);
       JOptionPane.showMessageDialog(this,"Passenger Successfully Added");
    }
    catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
```

REMOVING EXISTING RECORDS:



CODE FOR Remove Planes Button:

this.setVisible(false);

new Remove_Planes().setVisible(true);

CODE FOR Remove Staff Button:

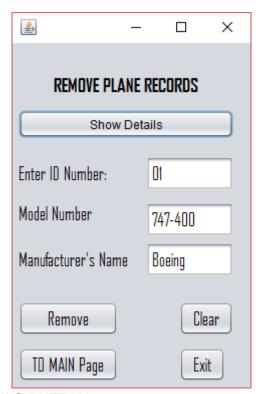
this.setVisible(false);

new Remove_Staff().setVisible(true);

CODE FOR Remove Passenger Button:

this.setVisible(false);

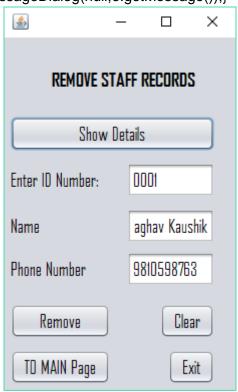
new Remove_Passenger().setVisible(true);



CODE FOR SHOW DETAILS BUTTON:

```
String id=tf1.getText();
    try
    {Class.forName("java.sql.DriverManager");
       Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1="select * from planes where Manufacturer ID="+id+";";
       ResultSet rs=(ResultSet)stmt.executeQuery(q1);
       if(rs.next())
       {
         String mno=rs.getString("Model_No");
         String mn=rs.getString("Manufacturer_Name");
         tf2.setText(mno);
         tf3.setText(mn);
         b2.setEnabled(true);
       }
       else
       {JOptionPane.showMessageDialog(null,"Please enter correct ID");}
    }
    catch(Exception e)
    {JOptionPane.showMessageDialog(null,e.getMessage());}
CODE FOR REMOVE BUTTON:
    try
    {Class.forName("java.sql.DriverManager");
```

```
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
Statement stmt=(Statement)con.createStatement();
String q1="delete from planes where Manufacturer_ID='"+tf1.getText()+"';";
stmt.executeUpdate(q1);
JOptionPane.showMessageDialog(this,"Plane Successfully Removed");
tf1.setText("");
tf2.setText("");
tf3.setText("");
b2.setEnabled(false);
}
catch(Exception e)
{JOptionPane.showMessageDialog(null,e.getMessage());}
```



CODE FOR SHOW DETAILS BUTTON:

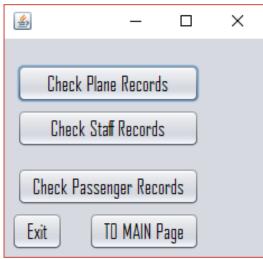
```
String id=tf1.getText();
try
{Class.forName("java.sql.DriverManager");
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
Statement stmt=(Statement)con.createStatement();
String q1="select * from staff where ID=""+id+"';";
ResultSet rs=(ResultSet)stmt.executeQuery(q1);
if(rs.next())
{
String n=rs.getString("Name");
String pn=rs.getString("Phone");
```

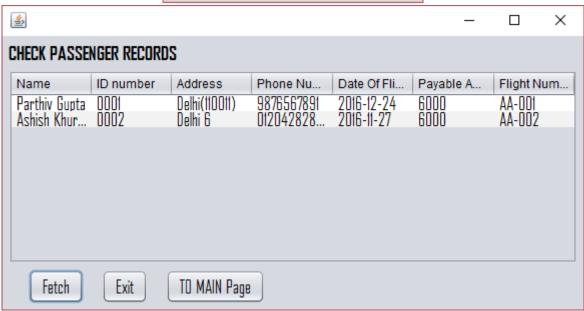
```
tf2.setText(n);
         tf3.setText(pn);
          b2.setEnabled(true);
       }
       else
       {JOptionPane.showMessageDialog(null,"Please enter correct ID");}
    }
    catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
CODE FOR REMOVE BUTTON:
     {Class.forName("java.sql.DriverManager");
       Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1="delete from staff where ID=""+tf1.getText()+"';";
       stmt.executeUpdate(q1);
       JOptionPane.showMessageDialog(this, "Staff Memeber Successfully Removed");
       tf1.setText("");
       tf2.setText("");
       tf3.setText("");
       b2.setEnabled(false);
    }
    catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
                                                        X
                               <u>₽</u>>
                                                 REMOVE PASSENGER RECORDS
                                       Show Details
                               Enter ID Number:
                                                 0001
                               Name
                                                  :hiv Gupta
                               Phone Number
                                                  76567891
                                   Remove
                                                  Clear
                                 TO MAIN Page
                                                   Exit
```

CODE FOR SHOW DETAILS BUTTON:

```
String id=tf1.getText();
    try
    {Class.forName("java.sql.DriverManager");
       Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1="select * from passenger where ID="+id+";";
       ResultSet rs=(ResultSet)stmt.executeQuery(q1);
       if(rs.next())
         String n=rs.getString("Name");
         String pn=rs.getString("Phone");
         tf2.setText(n);
         tf3.setText(pn);
         b2.setEnabled(true);
       }
       else
       {JOptionPane.showMessageDialog(null,"Please enter correct ID");}
    }
    catch(Exception e)
    {JOptionPane.showMessageDialog(null,e.getMessage());}
CODE FOR REMOVE BUTTON:
    try
    {Class.forName("java.sql.DriverManager");
       Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1="delete from passenger where ID="+tf1.getText()+";";
       stmt.executeUpdate(q1);
       JOptionPane.showMessageDialog(this,"Passenger Successfully Removed");
       tf1.setText("");
       tf2.setText("");
       tf3.setText("");
       b2.setEnabled(false);
    }
    catch(Exception e)
    {JOptionPane.showMessageDialog(null,e.getMessage());}
```

VIEWING EXISTING RECORDS:





CODE FOR FETCH BUTTON(PASSENGER RECORDS):

```
DefaultTableModel dtm=(DefaultTableModel)tb1.getModel();
     dtm.setRowCount(0);
try
{Class.forName("java.sql.DriverManager");
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
Statement stmt=(Statement)con.createStatement();
String q1="select * from passenger;";
ResultSet rs=(ResultSet)stmt.executeQuery(q1);
while(rs.next())
{
String name=rs.getString("Name");
String Id=rs.getString("ID");
String add=rs.getString("Address");
String pn=rs.getString("Phone");
String dof=rs.getString("DOF");
String pay=rs.getString("PayableAMT");
```

```
String fn=rs.getString("FlightNo");
Object ob[]={name,Id,add,pn,dof,pay,fn};
dtm.addRow(ob);
}
}
catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
                                                                                  <u>$</u>
                                                                                          X
      CHECK STAFF RECORDS
                   ID Number
                               Address
                                            Phone N...
                                                        Date Of J...
                                                                                Departm...
       Name
                                                                    Salary
                                                        2016-01-05
2016-01-09
                               NDIDA
                                            98105987...
                                                                    250000
                                                                                Pilot
       Raghav Ka...
                   0001
       Anubhay S... 0002
                                            98105436...
                                                                    3990000
                               NDIDA
                                                                                Pilot
        Fetch
                      Exit
                               TO MAIN Page
```

CODE FOR FETCH BUTTON(STAFF RECORDS):

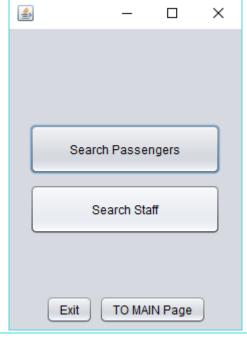
```
DefaultTableModel dtm=(DefaultTableModel)tb1.getModel();
     dtm.setRowCount(0);
try
{Class.forName("java.sql.DriverManager");
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
Statement stmt=(Statement)con.createStatement();
String q1="select * from staff;";
ResultSet rs=(ResultSet)stmt.executeQuery(q1);
while(rs.next())
{
String name=rs.getString("Name");
String Id=rs.getString("ID");
String add=rs.getString("Address");
String pn=rs.getString("Phone");
String doj=rs.getString("DOJ");
String sal=rs.getString("Salary");
String dep=rs.getString("Department");
Object ob[]={name,ld,add,pn,doj,sal,dep};
dtm.addRow(ob);
}
}
```

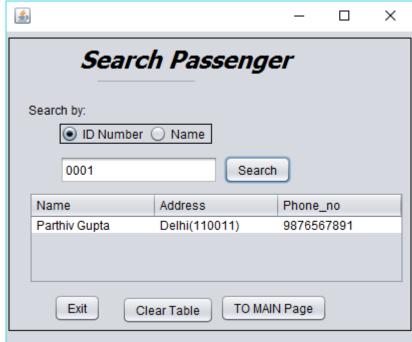
```
catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
           <u>$</u>
                                                                              ×
           CHECK PLANE RECORDS
            Manufac...
                       Manufac...
                                  Model N... Passen...
                                                        Date of ... No of En...
                                                                              No of D...
                                  747-400
                                             624
                                                        2016-01-...
            Boeina
                       ĬŻ
                                                        2016-05...
                                  A380
            Airbus
                       Exit
                                 TO MAIN Page
             Fetch
```

CODE FOR FETCH BUTTON(PLANE RECORDS):

```
DefaultTableModel dtm=(DefaultTableModel)tb1.getModel();
     dtm.setRowCount(0);
try
{Class.forName("java.sql.DriverManager");
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
Statement stmt=(Statement)con.createStatement();
String q1="select * from planes;";
ResultSet rs=(ResultSet)stmt.executeQuery(q1);
while(rs.next())
String mn=rs.getString("Manufacturer_Name");
String mld=rs.getString("Manufacturer_ID");
String mno=rs.getString("Model_NO");
String pc=rs.getString("Passenger_Capacity");
String doa=rs.getString("Date_Of_Addition");
String noe=rs.getString("No_of_engines");
String nod=rs.getString("No_of_desks");
Object ob[]={mn,mld,mno,pc,doa,noe,nod};
dtm.addRow(ob);
}
}
catch(Exception e)
     {JOptionPane.showMessageDialog(null,e.getMessage());}
```

SEARCHING EXISTING RECORDS:





CODE FOR SEARCH PASSENGER:

```
String id=tf1.getText();

DefaultTableModel dtm=(DefaultTableModel)tb1.getModel();

dtm.setRowCount(0);

try

{Class.forName("java.sql.DriverManager");

Connection

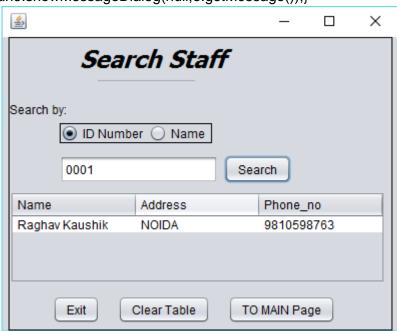
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root"," amity");

Statement stmt=(Statement)con.createStatement();

String q1=";";

if(rb1.isSelected())
```

```
{
    q1="select * from passenger where ID=""+id+"";";
  else
  {q1="select * from passenger where name="+id+";";}
  ResultSet rs=(ResultSet)stmt.executeQuery(q1);
  if(rs.next())
     String name=rs.getString("Name");
     String add=rs.getString("address");
     String pn=rs.getString("phone");
     Object ob[]={name,add,pn};
     dtm.addRow(ob);
  }
  else
  {if(rb1.isSelected())
     JOptionPane.showMessageDialog(null,"Please enter correct ID");
     JOptionPane.showMessageDialog(null,"Please enter correct Name");
  }
}
catch(Exception e)
{JOptionPane.showMessageDialog(null,e.getMessage());}
```

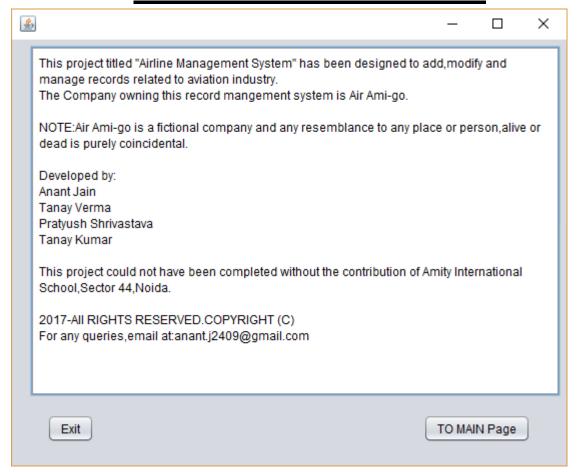


CODE FOR SEARCH STAFF:

```
String id=tf1.getText();
DefaultTableModel dtm=(DefaultTableModel)tb1.getModel();
dtm.setRowCount(0);
try
{Class.forName("java.sql.DriverManager");
```

```
Connection
con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost:3306/project","root","
amity");
       Statement stmt=(Statement)con.createStatement();
       String q1=";";
       if(rb1.isSelected())
       {
         q1="select * from staff where ID=""+id+"";";
       }
       else
       {q1="select * from staff where name=""+id+"";";}
       ResultSet rs=(ResultSet)stmt.executeQuery(q1);
       if(rs.next())
       {
          String name=rs.getString("Name");
          String add=rs.getString("address");
          String pn=rs.getString("phone");
          Object ob[]={name,add,pn};
          dtm.addRow(ob);
       }
       else
       {if(rb1.isSelected())
          JOptionPane.showMessageDialog(null,"Please enter correct ID");
          else
          JOptionPane.showMessageDialog(null,"Please enter correct Name");
       }
    }
    catch(Exception e)
    {JOptionPane.showMessageDialog(null,e.getMessage());}
```

ABOUT PROJECT PAGE:



THANK YOU

<u>Bibliography:</u>

- <u>www.google.com</u>
- Wolfram Alpha
- www.wikipedia.org
- Quora