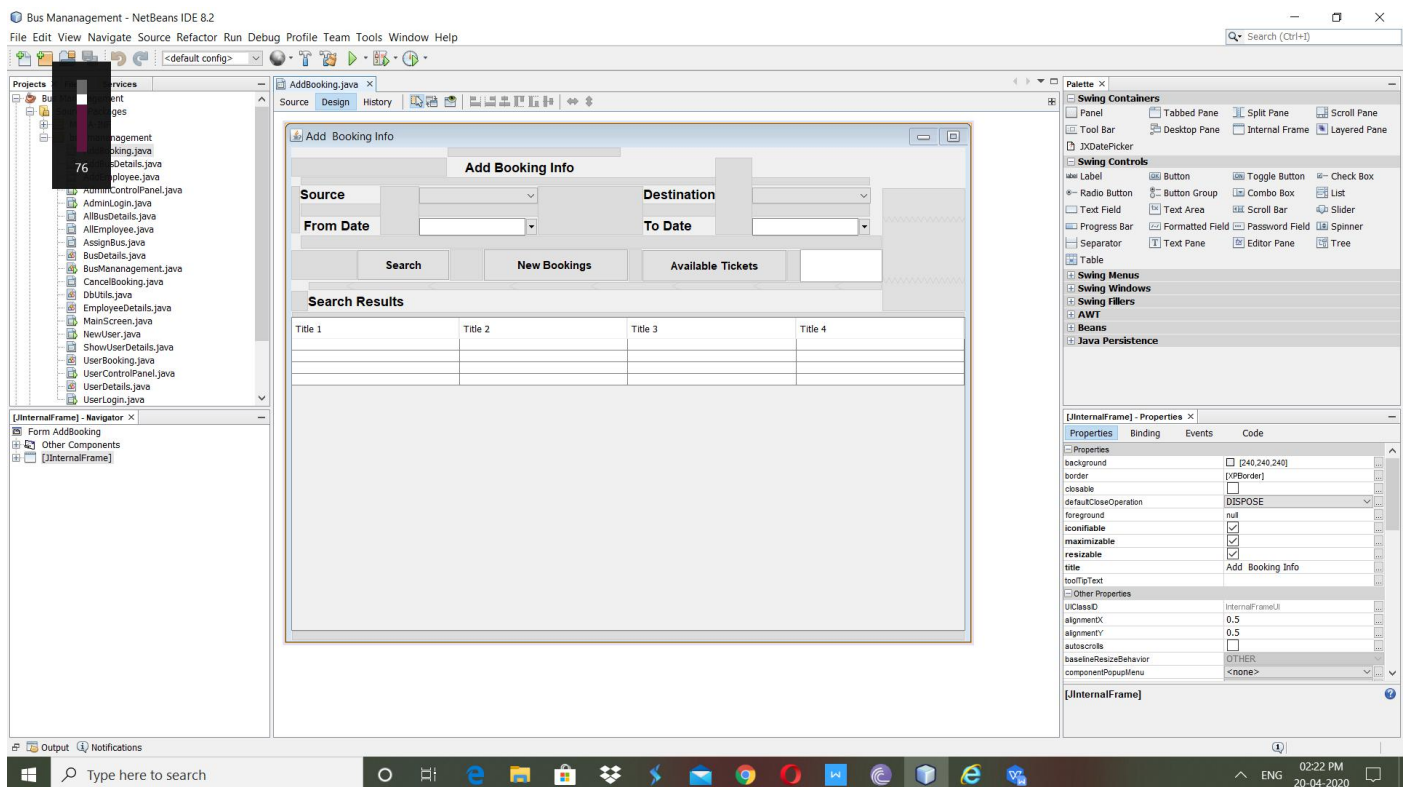# BUS RESERVATION SYSTEM : DBMS CASESTUDY (TEAM 1)

JAVA CODE FOR ADD BOOKING JFRAME FORM:-

```java
package bus.mananagement;
import java.awt.GridLayout;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.text.SimpleDateFormat;
import javax.swing.JComboBox;
import javax.swing.JDesktopPane;
import javax.swing.JFrame;
import javax.swing.JLabel;

import javax.swing.JOptionPane;
import javax.swing.JPanel;

import javax.swing.JTable;
import javax.swing.*;

import javax.swing.table.DefaultTableModel;
import javax.swing.table.TableModel;

public class AddBooking extends javax.swing.JInternalFrame {

    /**
```

```java
 * Creates new form AddBooking
 */

String luser;
public AddBooking( String loginuser) {
    initComponents();
    busSourceCBFillData();
    busDestinationCBFillData();
    this.luser=loginuser;

}

public void busSourceCBFillData()
{
    try{
        Class.forName("com.mysql.jdbc.Driver");
        String databaseURL = "jdbc:mysql://localhost:3308/busm?useSSL=false";
        Connection con = DriverManager.getConnection(databaseURL, "root", "");
        Statement stat = con.createStatement();
        String selectQuery="select distinct(bus_source) as bus_source from
 bus_details";
        ResultSet rs=stat.executeQuery(selectQuery);

        while(rs.next())
        {
            sourceCB.addItem(rs.getString("bus_source"));

        }


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

public void busDestinationCBFillData()
{
    try{
        Class.forName("com.mysql.jdbc.Driver");
        String databaseURL = "jdbc:mysql://localhost:3308/busm?useSSL=false";
        Connection con = DriverManager.getConnection(databaseURL, "root", "");
        Statement stat = con.createStatement();
        String selectQuery="select distinct(bus_dest) as bus_dest  from bus_details";
        ResultSet rs=stat.executeQuery(selectQuery);
        while(rs.next())
        {
            destinationCB.addItem(rs.getString("bus_dest"));
```

```java
            }



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


    /**
     * 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() {

        jLabel1 = new javax.swing.JLabel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        sourceCB = new javax.swing.JComboBox<>();
        destinationCB = new javax.swing.JComboBox<>();
        jLabel4 = new javax.swing.JLabel();
        fromDP = new org.jdesktop.swingx.JXDatePicker();
        jButton1 = new javax.swing.JButton();
        jLabel5 = new javax.swing.JLabel();
        jScrollPane1 = new javax.swing.JScrollPane();
        jTable1 = new javax.swing.JTable();
        jLabel7 = new javax.swing.JLabel();
        toDP = new org.jdesktop.swingx.JXDatePicker();
        jButton2 = new javax.swing.JButton();
        jButton3 = new javax.swing.JButton();
        at = new javax.swing.JTextField();

        setIconifiable(true);
        setMaximizable(true);
        setResizable(true);
        setTitle("Add  Booking Info");

        jLabel1.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
        jLabel1.setText("     Add Booking Info");

        jLabel2.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
        jLabel2.setText("Source");

        jLabel3.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
```

```java
jLabel3.setText("Destination");

jLabel4.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
jLabel4.setText(" From Date");

jButton1.setFont(new java.awt.Font("Ubuntu", 1, 15)); // NOI18N
jButton1.setText("Search");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jLabel5.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
jLabel5.setText("Search Results");

jTable1.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jScrollPane1.setViewportView(jTable1);

jLabel7.setFont(new java.awt.Font("Ubuntu", 1, 18)); // NOI18N
jLabel7.setText("To Date");

jButton2.setFont(new java.awt.Font("Ubuntu", 1, 15)); // NOI18N
jButton2.setText("New Bookings ");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jButton3.setFont(new java.awt.Font("Ubuntu", 1, 15)); // NOI18N
jButton3.setText("Available Tickets");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
```

```java
        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.TRAILING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
LEADING)
                    .addGroup(layout.createSequentialGroup()
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.LEADING)
                            .addGroup(layout.createSequentialGroup()
                                .addContainerGap()
                                .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.LEADING)
                                    .addComponent(jLabel2,
javax.swing.GroupLayout.PREFERRED_SIZE, 84, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addComponent(jLabel4,
javax.swing.GroupLayout.PREFERRED_SIZE, 110, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addGap(54, 54, 54)
                                .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.LEADING)
                                    .addComponent(sourceCB,
javax.swing.GroupLayout.PREFERRED_SIZE, 163, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addComponent(fromDP,
javax.swing.GroupLayout.PREFERRED_SIZE, 163, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addGap(145, 145, 145)
                                .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.LEADING)
                                    .addComponent(jLabel3)
                                    .addComponent(jLabel7,
javax.swing.GroupLayout.PREFERRED_SIZE, 72, javax.swing.GroupLayout.PREFERRED_SIZE)))
                            .addGroup(layout.createSequentialGroup()
                                .addGap(214, 214, 214)
                                .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 240, javax.swing.GroupLayout.PREFERRED_SIZE)))
                        .addGap(51, 51, 51)
                        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Al
ignment.TRAILING)
                            .addComponent(toDP, javax.swing.GroupLayout.PREFERRED_SIZE,
163, javax.swing.GroupLayout.PREFERRED_SIZE)
                            .addComponent(destinationCB,
javax.swing.GroupLayout.PREFERRED_SIZE, 163, javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(23, 23, 23)
                        .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE,
156, javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addGroup(layout.createSequentialGroup()
                        .addGap(90, 90, 90)
```

```java
                            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
128, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(46, 46, 46)
                        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
200, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE,
200, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addGap(18, 18, 18)
                        .addComponent(at, javax.swing.GroupLayout.PREFERRED_SIZE, 113,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                .addGap(0, 114, Short.MAX_VALUE))
        );
        layout.setVerticalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_SIZE, 28,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(11, 11, 11)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
                    .addComponent(jLabel2)
                    .addComponent(sourceCB, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(jLabel3)
                    .addComponent(destinationCB, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
BASELINE)
                    .addComponent(jLabel4)
                    .addComponent(jLabel7)
                    .addComponent(fromDP, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(toDP, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(18, 18, 18)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.
LEADING)
                    .addComponent(jButton3, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 45, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignm
ent.BASELINE)
                        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
43, javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jButton2, javax.swing.GroupLayout.PREFERRED_SIZE,
45, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```java
                        .addComponent(at, javax.swing.GroupLayout.PREFERRED_SIZE, 45,
javax.swing.GroupLayout.PREFERRED_SIZE)))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                    .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addContainerGap())
        );

        pack();
    }// </editor-fold>


    public void infoMessage(String message, String tittle) {
        JOptionPane.showMessageDialog(null, message, tittle,
JOptionPane.INFORMATION_MESSAGE);
}


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

        String source=(String)sourceCB.getSelectedItem();
        String destination=(String)destinationCB.getSelectedItem();
        java.util.Date fromDate=fromDP.getDate();
        java.util.Date toDate=toDP.getDate();

        SimpleDateFormat sdf=new SimpleDateFormat("yyyy-MM-dd");
        String fromDateFormated=sdf.format(fromDate);
        String toDateFormated=sdf.format(toDate);



        try{
            Class.forName("com.mysql.jdbc.Driver");
            String databaseURL = "jdbc:mysql://localhost:3308/busm?useSSL=false";
            Connection con = DriverManager.getConnection(databaseURL, "root", "");
            Statement stat = con.createStatement();
            String selectQuery = "select * from bus_details where bus_source='"+source+"'
and bus_dest='"+destination+"' and depart_date between '"+fromDateFormated+"' and
'"+toDateFormated+"' ";
            ResultSet rs=stat.executeQuery(selectQuery);

            jTable1.setModel(DbUtils.resultSetToTableModel(rs));
            jTable1.setAutoResizeMode(JTable.AUTO_RESIZE_OFF);


        }
```

```java
        catch(Exception e)
        {
            System.out.println(e);
}

    }

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

        int id=1;
        String source =(String) sourceCB.getSelectedItem();
        String destination = (String)destinationCB.getSelectedItem();
        java.util.Date fromDate= fromDP.getDate();
        java.util.Date toDate=toDP.getDate();

        SimpleDateFormat sdf=new SimpleDateFormat("yyyy-MM-dd");
        String fromDateFormated=sdf.format(fromDate);
        String toDateFormated=sdf.format(toDate);


    try {
            Class.forName("com.mysql.jdbc.Driver");
            String databaseURL = "jdbc:mysql://localhost:3308/busm?useSSL=false";
            Connection con = DriverManager.getConnection(databaseURL, "root", "");
            Statement stat = con.createStatement();
            String insertQuery = "insert into user_booking values('"+(id+1)+"','"+luser
+"','"+source+"','"+destination+"','"+fromDateFormated+"','"+toDateFormated+"')";

        stat.executeUpdate(insertQuery);

        infoMessage("information is inserted", "Welcome!");
        dispose();
        UserLogin ln=new UserLogin();
        ln.setLocationRelativeTo(null);
        ln.setVisible(true);




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


    }
```

```java
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    int a=0;
    String source ="'"+(String) sourceCB.getSelectedItem()+"'";
    String destination = "'"+(String)destinationCB.getSelectedItem()+"'";
    java.util.Date fromDate= fromDP.getDate();
    java.util.Date toDate=toDP.getDate();


    SimpleDateFormat sdf=new SimpleDateFormat("yyyy-MM-dd");
    String fromDateFormated=sdf.format(fromDate);
    String toDateFormated=sdf.format(toDate);


    try {
        Class.forName("com.mysql.jdbc.Driver");
        String databaseURL = "jdbc:mysql://localhost:3308/busm?useSSL=false";
        Connection con = DriverManager.getConnection(databaseURL, "root", "");
        Statement stat = con.createStatement();
        String query="SELECT * FROM bus_details where bus_source="+source+" and
bus_dest="+destination;
        ResultSet result;
        result=stat.executeQuery(query);
        result.next();
        a=result.getInt("total_seat");
        System.out.println(a);
        at.setText(""+a);
        String insertQuery = "Update bus_details SET total_seat="+(a-1)+"Where
total_seat="+a;
        stat.executeUpdate(insertQuery);

        infoMessage("Tickets are Available!", "");

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



// Variables declaration - do not modify
private javax.swing.JTextField at;
private javax.swing.JComboBox<String> destinationCB;
private org.jdesktop.swingx.JXDatePicker fromDP;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
```

```java
    private javax.swing.JLabel jLabel5;
    private javax.swing.JLabel jLabel7;
    private javax.swing.JScrollPane jScrollPane1;
    private javax.swing.JTable jTable1;
    private javax.swing.JComboBox<String> sourceCB;
    private org.jdesktop.swingx.JXDatePicker toDP;
    // End of variables declaration
}
```