R.S.M. Public School

Supaul (Bihar)

A Project Report

on

Hotel Management

For

AISSCE 2023-2024 Examination

[As a part of the Information Technology Course (802)]

SUBMITTED BY

.....

[Roll No…….]

Under the Guidance of:

Mr. Ankit Sultania

PGT (Comp.Sc)

CERTIFICATE

This is to certify that the Project / Dissertation entitled **Hotel Management** is a bonafide work done by Master …… of class XII Session 2023-2024 in partial fulfillment of CBSE's AISSCE Examination 2024 and has been carried out under my direct supervision and guidance. This report or a similar report on the topic has not been submitted for any other examination and does not form a part of any other course undergone by the candidate.

……
Signature of Student
Name: ……..
Roll No.: ……

……..
Signature of Teacher/Guide
Name: Mr. Ankit Sultania
Designation: PGT (Comp.Sc.)

Place:……
Date:……..

……..
Signature of Principal
Name: Dr. V. C. Mishra

ACKNOWLEDGEMENT

I undertook this Project work, as the part of my XII-Information Technology course. I had tried to apply my best of knowledge and experience, gained during the study and class work experience. However, developing software system is generally a quite complex and time-consuming process. It requires a systematic study, insight vision and professional approach during the design and development. Moreover, the developer always feels the need, the help and good wishes of the people near you, who have considerable experience and idea.

I would like to extend my sincere thanks and gratitude to my teacher **Mr. Ankit Sultania.** I am very much thankful to our Principal **Dr. V.C. Mishra** for giving valuable time and moral support to develop this software.

……

Class XII

Introduction

This software project is developed to automate the functionalities of a Hotel. The purpose of the software project is to develop the Management Information System (MIS) to automate the record keeping of Room, Booking, Status and receive transactions with a view to enhance the decision making of the functionaries.

A MIS mainly consists of a computerized database, a collection of inter-related tables for a particular purpose, capable to produce different reports relevant to the user. An application program is tied with the database for easy access and interface to the database. Using Application program or front-end, we can store, retrieve and manage all information in proper way.

This software, being simple in design and working, does not require much of training to users, and can be used as a powerful tool for automating a Hotel Management System.

During coding and design of the software Project, Java NetBeans IDE, a powerful front-end tool is used for getting Graphical User Interface (GUI) based integrated platform and coding simplicity. As a back-end a powerful, open source RDBMS, My SQL is used as per requirement of the CBSE curriculum of Information Technology Course.

Hotel Management

Database Design

Database Name: Hotal

Password used : pace

List of Tables:

```
mysql> use hotal
Database changed
mysql> show tables;
+-----------------+
| Tables_in_hotal |
+-----------------+
| booking         |
| room            |
| status1         |
| status10        |
| status11        |
| status12        |
| status2         |
| status3         |
| status4         |
| status5         |
| status6         |
| status7         |
| status8         |
| status9         |
| type            |
+-----------------+
15 rows in set (0.41 sec)
```

Table Structure: Room

```
mysql> describe room;
+----------+------------+------+-----+---------+-------+
| Field    | Type       | Null | Key | Default | Extra |
+----------+------------+------+-----+---------+-------+
| RoomNo   | int(11)    | NO   | PRI | NULL    |       |
| TypeCode | varchar(2) | YES  |     | NULL    |       |
+----------+------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

Table Structure: Booking

```
mysql> describe booking;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| BookingNo | int(11)     | NO   | PRI | NULL    |       |
| CustName  | varchar(20) | YES  |     | NULL    |       |
| address   | varchar(30) | YES  |     | NULL    |       |
| sex       | varchar(1)  | YES  |     | NULL    |       |
| age       | int(11)     | YES  |     | NULL    |       |
| RoomNo    | int(11)     | YES  |     | NULL    |       |
| FromD     | date        | YES  |     | NULL    |       |
| ToD       | date        | YES  |     | NULL    |       |
| Advance   | int(11)     | YES  |     | NULL    |       |
| Total     | int(11)     | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
10 rows in set (0.00 sec)
```

Table Structure: Type

```
mysql> describe type;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| TypeCode    | char(2)     | NO   | PRI | NULL    |       |
| Description | varchar(20) | YES  |     | NULL    |       |
| charges     | int(11)     | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
```

Table Structure: Status1 … Status12 (12 tables for storing status of 12 rooms)

```
mysql> describe status1;
+-----------+----------+------+-----+---------+-------+
| Field     | Type     | Null | Key | Default | Extra |
+-----------+----------+------+-----+---------+-------+
| RoomNo    | int(11)  | NO   | PRI | NULL    |       |
| TypeCode  | char(20) | YES  |     | NULL    |       |
| d1        | char(1)  | YES  |     | NULL    |       |
| d2        | char(1)  | YES  |     | NULL    |       |
| d3        | char(1)  | YES  |     | NULL    |       |
| d4        | char(1)  | YES  |     | NULL    |       |
| d5        | char(1)  | YES  |     | NULL    |       |
| d6        | char(1)  | YES  |     | NULL    |       |
| d7        | char(1)  | YES  |     | NULL    |       |
| d8        | char(1)  | YES  |     | NULL    |       |
| d9        | char(1)  | YES  |     | NULL    |       |
| d10       | char(1)  | YES  |     | NULL    |       |
| d11       | char(1)  | YES  |     | NULL    |       |
| d12       | char(1)  | YES  |     | NULL    |       |
| d13       | char(1)  | YES  |     | NULL    |       |
| d14       | char(1)  | YES  |     | NULL    |       |
| d15       | char(1)  | YES  |     | NULL    |       |
| d16       | char(1)  | YES  |     | NULL    |       |
| d17       | char(1)  | YES  |     | NULL    |       |
| d18       | char(1)  | YES  |     | NULL    |       |
| d19       | char(1)  | YES  |     | NULL    |       |
| d20       | char(1)  | YES  |     | NULL    |       |
| d21       | char(1)  | YES  |     | NULL    |       |
| d22       | char(1)  | YES  |     | NULL    |       |
| d23       | char(1)  | YES  |     | NULL    |       |
| d24       | char(1)  | YES  |     | NULL    |       |
| d25       | char(1)  | YES  |     | NULL    |       |
| d26       | char(1)  | YES  |     | NULL    |       |
| d27       | char(1)  | YES  |     | NULL    |       |
| d28       | char(1)  | YES  |     | NULL    |       |
| d29       | char(1)  | YES  |     | NULL    |       |
| d30       | char(1)  | YES  |     | NULL    |       |
| d31       | char(1)  | YES  |     | f       |       |
+-----------+----------+------+-----+---------+-------+
33 rows in set (0.02 sec)
```

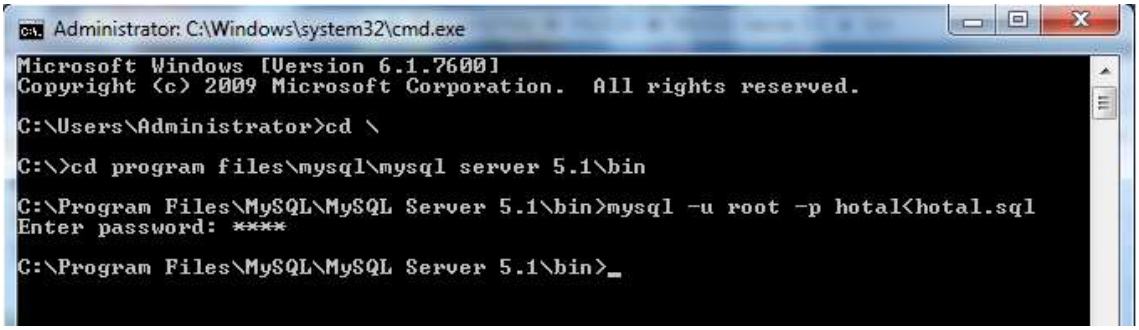
Restoring Database:

This package contains hotal.sql file which may be used to create all the tables with initial data.

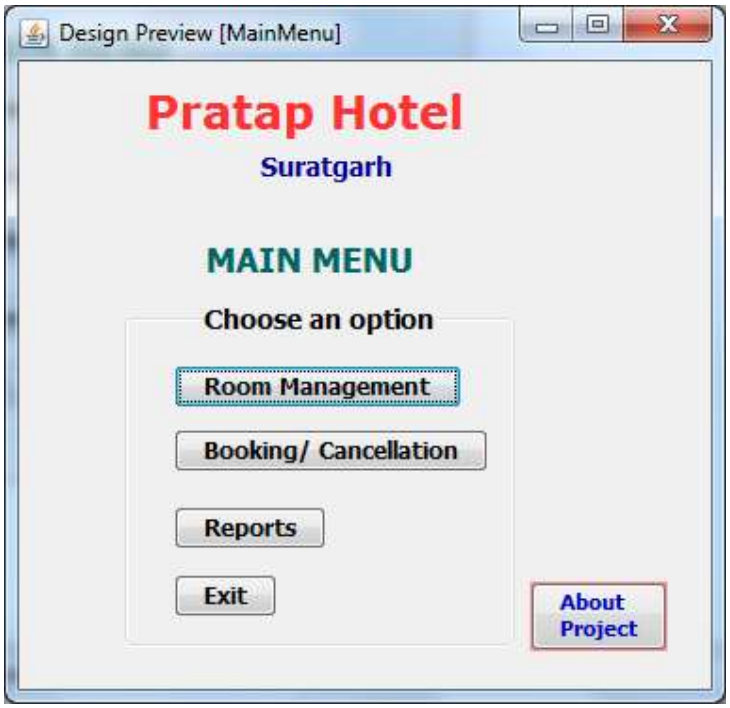
Step 1: Open Mysql and make a blank database named Hotal

Mysql> create database hotal;

Step 2: Open DOS (Run-> cmd) and give the following commands to restore the table.


Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\Administrator>cd \
C:\>cd program files\mysql\mysql server 5.1\bin
C:\Program Files\MySQL\MySQL Server 5.1\bin>mysql -u root -p hotal<hotal.sql
Enter password: ****
C:\Program Files\MySQL\MySQL Server 5.1\bin>

Form Design & Coding

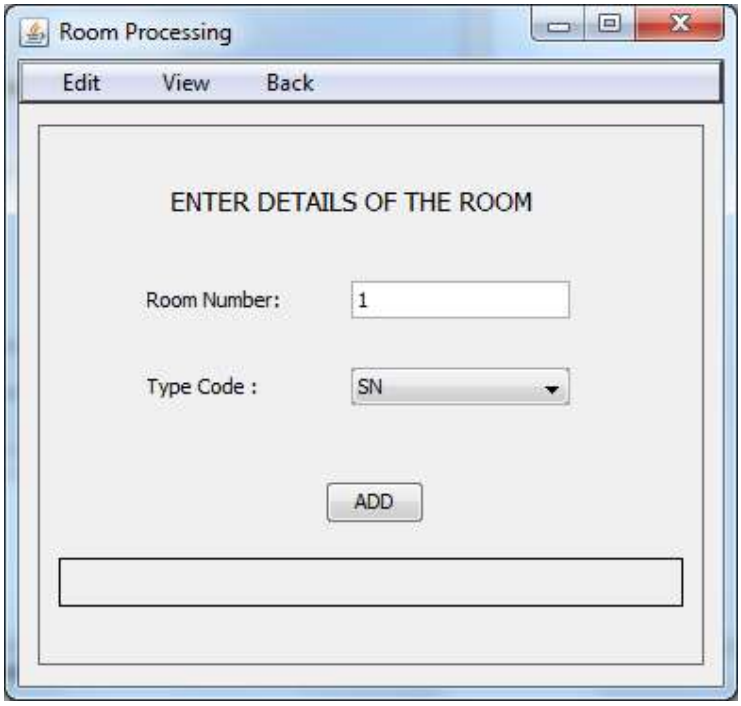


Form Name: MainMenu.java

Code:

```
public class MainMenu extends javax.swing.JFrame {
   /** Creates new form MainMenu */
   public MainMenu() {
      initComponents();
   }
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
       RPMenu rp = new RPMenu();
         rp.setVisible(true);
         this.setVisible(false);
   }
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      BookCancel bc = new BookCancel();
         bc.setVisible(true);
         this.setVisible(false);
```

```
    }
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Report rp = new Report();
            rp.setVisible(true);
            this.setVisible(false);
    }
    private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        System.exit(0);
    }
    private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        AboutMe.setVisible(false);
}
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        AboutMe.setVisible(true);
    }

    public static void main(String args[]) {
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new MainMenu().setVisible(true);
            }
        });
    }
```



Form Name: RpMenu.java

```
import java.awt.Container;
import java.sql.*;
public class RPMenu extends javax.swing.JFrame {

   /** Creates new form RPMenu */
   public RPMenu() {
      initComponents();
      EnterRoomDetailsPanel.setVisible(false);
      EnterRoomNoPanel.setVisible(false);
      EnterNewChargesPanel.setVisible(false);
      RoomProcessingOptionsPanel.setVisible(true);
   }
  private void AddBActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      error.setText("  ");
      String Rnum = RNumTF.getText();
      String Tcode = TCode.getSelectedItem().toString();
      try
      {
```

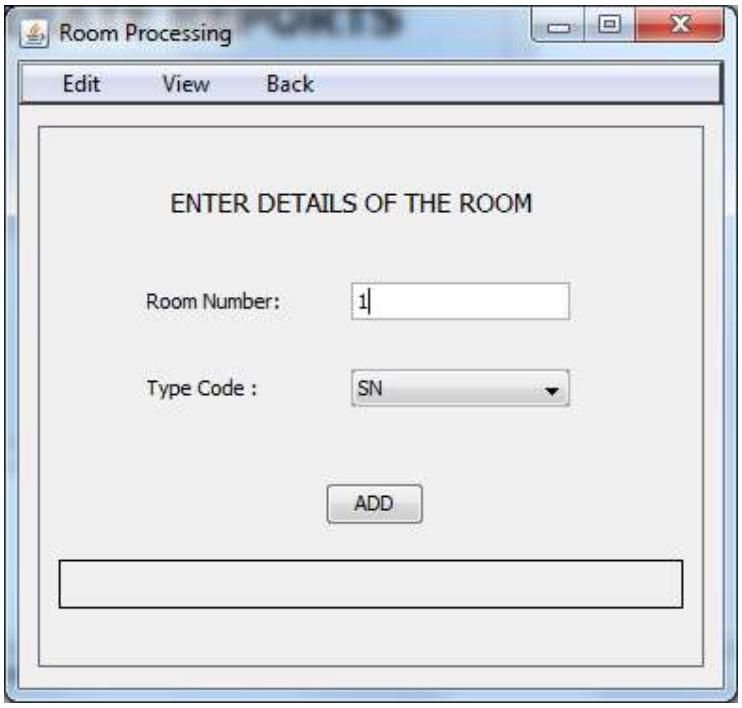
```
        Class.forName("java.sql.Driver");
        String database = "jdbc:mysql://localhost:3306/Hotal";
        Connection conn = DriverManager.getConnection(database, "root",
"pace");
        Statement stmt = conn.createStatement();
        String sql = "Insert into Room values ( '" + Rnum + "','" + Tcode + "')" ;
        stmt.executeUpdate(sql);
        for(int i=1; i<13;i++)
        {
           String sql2 = "Insert into Status" + i + "(RoomNo, TypeCode) values (
'" + Rnum + "','" + Tcode + "')" ;
           Statement stmt2 = conn.createStatement();
           stmt2.executeUpdate(sql2);
        }
        error.setText("Information added");
        stmt.close();
        conn.close();
      }
      catch (Exception e) { error.setText("Incorrect Entry");}
   }

   private void TCode2ItemStateChanged(java.awt.event.ItemEvent evt) {
      // TODO add your handling code here:
     String code = TCode2.getSelectedItem().toString();
      try
      {

        Class.forName("java.sql.Driver");
        String database = "jdbc:mysql://localhost:3306/Hotal";
        Connection conn = DriverManager.getConnection(database, "root",
"pace");
        Statement stmt = conn.createStatement();
        String sql = "select Charges from Type where TypeCode = '" + code +
"'";
        ResultSet rs = stmt.executeQuery(sql);
        rs.next();
```

```
            int str = rs.getInt("Charges");
            rs.close();
            stmt.close();
            conn.close();
            curCharges.setText("Rs " + str);
        } catch (Exception e) { }
}

    private void ChangeBActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String code = TCode2.getSelectedItem().toString();
        int charges =Integer.parseInt( ChargesTF.getText());
        try
        {
            Class.forName("java.sql.Driver");
            String database = "jdbc:mysql://localhost:3306/Hotal";
            Connection conn = DriverManager.getConnection(database, "root",
"pace");
            Statement stmt = conn.createStatement();
            String sql = "update Type set Charges = " + charges + " where
TypeCode = '" + code + "'" ;
            stmt.executeUpdate(sql);
            stmt.close();
            conn.close();
            error1.setText("Information added");
        } catch (Exception e) { error1.setText("Invalid Data");}
}

    private void SearchBActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        int rnum =Integer.parseInt(RNoTF.getText());
        try
        {
            Class.forName("java.sql.Driver");
            String database = "jdbc:mysql://localhost:3306/Hotal";
```

```
            Connection conn = DriverManager.getConnection(database, "root",
"pace");
            Statement stmt = conn.createStatement();
            String sql = "select Type.TypeCode, Description, Charges from Type ,
Room where RoomNo = " + rnum + " and Type.TypeCode =
Room.TypeCode";
            ResultSet rs = stmt.executeQuery(sql);
            rs.next();
            String str = rs.getString("TypeCode");
            roomDetailsTA.setText(str);
            String str1 = rs.getString("Description");
            String str2 = rs.getString("Charges");
            roomDetailsTA.setText("Room Number :" + rnum + "\nType: " + str +
"\nDescription: " + str1 + "\nCharges : " + str2);
            rs.close();
            stmt.close();
            conn.close();
        } catch (Exception e) { error2.setText("Room Number Not Found");}
}

    private void BackActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
    }

    private void NewRoomBActionPerformed(java.awt.event.ActionEvent evt)
{
        EnterNewChargesPanel.setVisible(false);
        RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(false);
        EnterRoomDetailsPanel.setVisible(true);
    }

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

```
        EnterRoomDetailsPanel.setVisible(false);
         RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(false);
        EnterNewChargesPanel.setVisible(true);
    }

    private void RDetailsBActionPerformed(java.awt.event.ActionEvent evt) {
            EnterRoomDetailsPanel.setVisible(false);
        EnterNewChargesPanel.setVisible(false);
        RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(true);
    }

    private void
back2MainMItemActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
}

    private void logoutMItemActionPerformed(java.awt.event.ActionEvent
evt) {
        // TODO add your handling code here:
        //new login().setVisible(true);
        this.setVisible(false);
}

    private void
AddRoomMItemActionPerformed(java.awt.event.ActionEvent evt) {
        EnterNewChargesPanel.setVisible(false);
        RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(false);
        EnterRoomDetailsPanel.setVisible(true);
}
```

```
    private void
ChangeChargesMItemActionPerformed(java.awt.event.ActionEvent evt) {
        EnterRoomDetailsPanel.setVisible(false);
        RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(false);
        EnterNewChargesPanel.setVisible(true);
}

    private void
RoomDetailsMItemActionPerformed(java.awt.event.ActionEvent evt) {
        EnterRoomDetailsPanel.setVisible(false);
        EnterNewChargesPanel.setVisible(false);
        RoomProcessingOptionsPanel.setVisible(false);
        EnterRoomNoPanel.setVisible(true);
}
```



Form Name: Report.java

```
import java.sql.*;
import javax.swing.JOptionPane;
public class Report extends javax.swing.JFrame {

    /** Creates new form Report */
```

```
    public Report() {
        initComponents();
        Entry4ResStatusPanel.setVisible(false);
        Entry4BillPanel.setVisible(false);
        Entry4ResSlipPanel.setVisible(false);
        ReportingOptionsPanel.setVisible(true);
    }
    private void SearchBTNActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        int month = Integer.parseInt(MonthCB.getSelectedItem().toString());
        new Status(month).setVisible(true);
        //this.setVisible(false);
}
private boolean search(int bno)
{
     try {
            Class.forName("java.sql.Driver");
            String database = "jdbc:mysql://localhost:3306/Hotal";
            Connection conn = DriverManager.getConnection(database, "root",
"pace");
            Statement stmt = conn.createStatement();
            String sql = "select * from Booking where BookingNo = " + bno;
            ResultSet rs = stmt.executeQuery(sql);
            if(rs.next())
            {
              return true;
            }
            else
            {
               return false;
            }
        } catch (Exception e) { JOptionPane.showMessageDialog(null,"" + e);
        return false; }
}
private void
GenerateResSlipBTNActionPerformed(java.awt.event.ActionEvent evt) {
```

```
        // TODO add your handling code here:
        int bno = Integer.parseInt( BokingNo4ResSlipTF.getText());
       if(search(bno))
       {
           new ReservaTionSlip(bno).setVisible(true);
           this.setVisible(false);
       }
       else
       {
          error1.setText("Unable to fine Booking number");
       }
}

    private void BackActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
}

    private void StatusBTNActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Entry4ResSlipPanel.setVisible(false);
         Entry4BillPanel.setVisible(false);
        ReportingOptionsPanel.setVisible(false);
        Entry4ResStatusPanel.setVisible(true);
}

    private void RSlipBTNActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Entry4ResStatusPanel.setVisible(false);
         Entry4BillPanel.setVisible(false);
        ReportingOptionsPanel.setVisible(false);
        Entry4ResSlipPanel.setVisible(true);
}
```

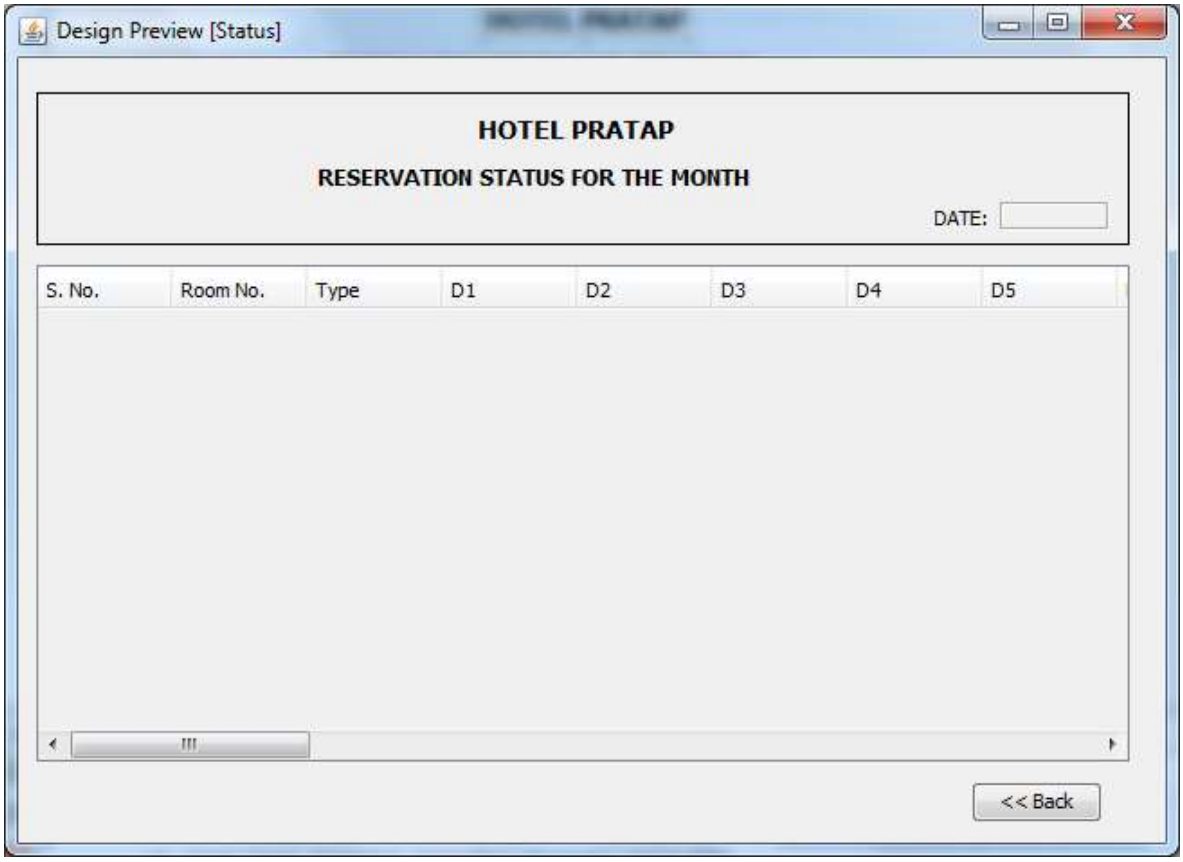
```
    private void BillBTNActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        Entry4ResStatusPanel.setVisible(false);
         ReportingOptionsPanel.setVisible(false);
        Entry4ResSlipPanel.setVisible(false);
        Entry4BillPanel.setVisible(true);
}

    private void GenerateBillBTNActionPerformed(java.awt.event.ActionEvent
evt) {
        // TODO add your handling code here:
                    int bno = Integer.parseInt( BokingNo4BillTF.getText());
      if(search(bno))
      {
         new Bill(bno).setVisible(true);
         this.setVisible(false);
      }
      else
      {
           error2.setText("Unable to fine Booking number");
      }
}

    private void
back_MainMenuMItemActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
}

    private void
back_LogoutMItemActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        //new login().setVisible(true);
        this.setVisible(false);
```

```
}

   private void
view_StatusMItemActionPerformed(java.awt.event.ActionEvent evt) {
      Entry4ResSlipPanel.setVisible(false);
      Entry4BillPanel.setVisible(false);
      ReportingOptionsPanel.setVisible(false);
      Entry4ResStatusPanel.setVisible(true);
}

   private void
view_ResSlipMItemActionPerformed(java.awt.event.ActionEvent evt) {
      Entry4ResStatusPanel.setVisible(false);
      ReportingOptionsPanel.setVisible(false);
      Entry4BillPanel.setVisible(false);
      Entry4ResSlipPanel.setVisible(true);
}

   private void view_BillMItemActionPerformed(java.awt.event.ActionEvent
evt) {
      Entry4ResStatusPanel.setVisible(false);
       ReportingOptionsPanel.setVisible(false);
      Entry4ResSlipPanel.setVisible(false);
      Entry4BillPanel.setVisible(true);
}

   private void
BokingNo4ResSlipTFActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
}
```

Form Name: ReservationSlip.java

```
import java.sql.*;
import javax.swing.JOptionPane;
import java.text.*;
public class ReservaTionSlip extends javax.swing.JFrame {
   int bookingNo;
   /** Creates new form ReservaTionSlip */
   public ReservaTionSlip(int bno) {
      initComponents();
      bookingNo = bno;
      BNoL.setText(bno + "");
      java.util.Date D = new java.util.Date();
      DateFormat df = DateFormat.getDateInstance(DateFormat.SHORT);
      dateL.setText(df.format(D));
      try {
         Class.forName("java.sql.Driver");
         String database = "jdbc:mysql://localhost:3306/Hotal";
         Connection conn = DriverManager.getConnection(database, "root",
"pace");
         Statement stmt = conn.createStatement();
```

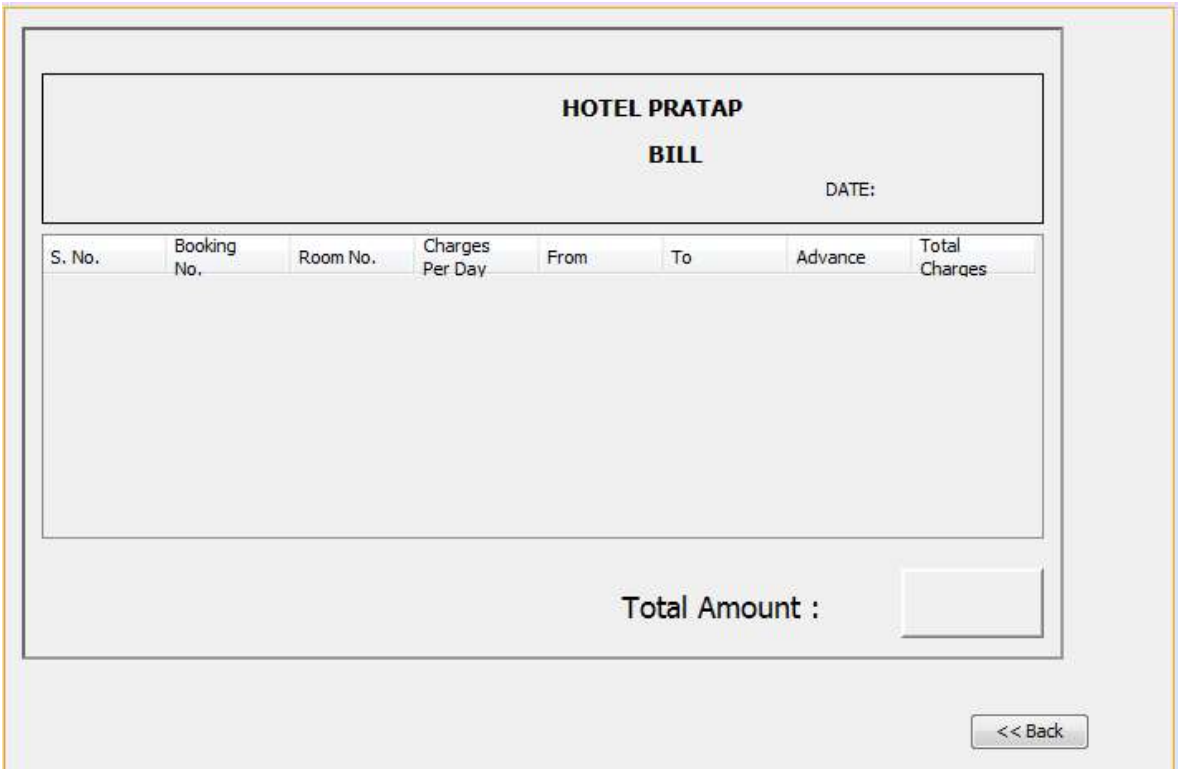
```
            String sql = "select * from Booking where BookingNo = " + bookingNo;
            ResultSet rs = stmt.executeQuery(sql);
            if(rs.next())
            {
               RNoL.setText(rs.getString("RoomNo"));
               NameL.setText(rs.getString("CustName"));
               AddressL.setText(rs.getString("Address"));
               FromL.setText(df.format(rs.getDate("FromD")));
               ToL.setText(df.format(rs.getDate("ToD")));
               String s = rs.getString("Sex");
               if(s.equals("m"))
                  s = "Male";
               else
                  s = "Female";
               SexL.setText(s);
               AgeL.setText(rs.getString("Age"));
               AdvanceL.setText(rs.getString("Advance"));
            }
            rs.close();
            stmt.close();
            conn.close();
         }
          catch (Exception e) { JOptionPane.showMessageDialog(null,"" + e);
         }
      }
    private void GetBillBTNActionPerformed(java.awt.event.ActionEvent evt) {
         // TODO add your handling code here:
         new Bill(bookingNo).setVisible(true);
         this.setVisible(false);
}
```



Form Name: Status.java

```
import java.sql.*;
import javax.swing.table.*;
import javax.swing.JOptionPane;
public class Status extends javax.swing.JFrame {
   int month;

   /** Creates new form Status */
   public Status(int m) {
      initComponents();
      month=m;
      int SNo = 1;
       jLabel2.setText(jLabel2.getText() + month + "/2011");
       dateLBL.setText(month+ "/2010");
       try {
         Class.forName("java.sql.Driver");
         String database = "jdbc:mysql://localhost:3306/Hotal";
         Connection conn = DriverManager.getConnection(database, "root",
"pace");
```

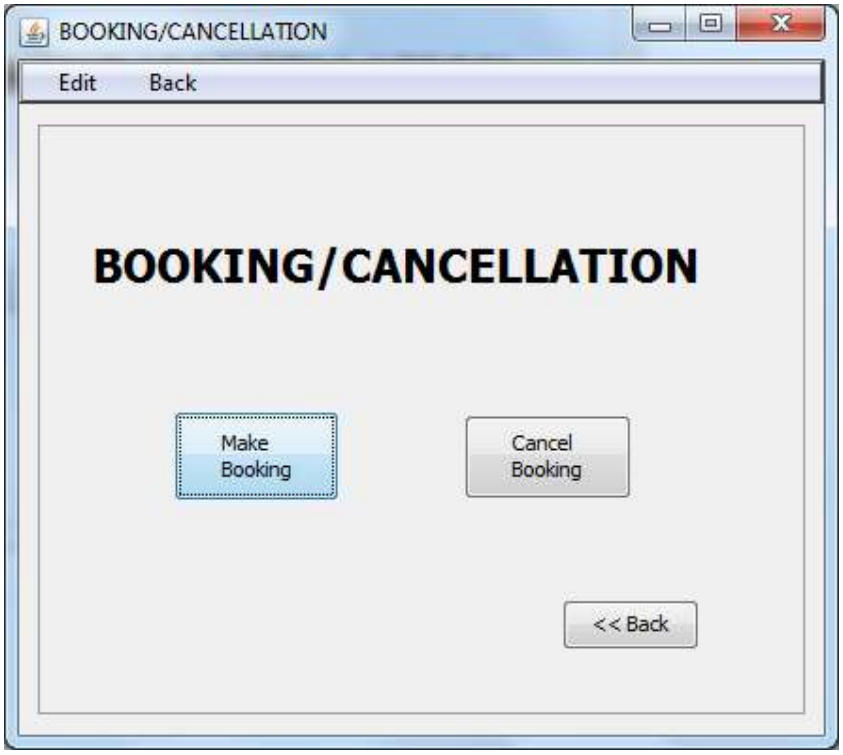
```
            Statement stmt = conn.createStatement();
            String sql = "select * from Status" + m;
            ResultSet rs = stmt.executeQuery(sql);
            Object[] newrow = new Object[34];
            while(rs.next())
            {
                newrow[0] = SNo + "";
               int max =0;
               if(m==2)
                  max = 28;
               else if(m==4 || m==6 || m==9 || m==11)
                  max=30;
               else
                  max =31;
               for(int i=1;i<max+3;i++)
                  newrow[i]=rs.getObject(i);
               for(int j=33;j>max+2;j--)
                  newrow[j]="-";
               DefaultTableModel tm = (DefaultTableModel)statusTBL.getModel();
               tm.addRow(newrow);
               SNo++;
            }
            rs.close();
            stmt.close();
            conn.close();
         }
          catch (Exception e) { JOptionPane.showMessageDialog(null,"" + e);
         }

      }
   private void BackBTNActionPerformed(java.awt.event.ActionEvent evt) {
         // TODO add your handling code here:
         new MainMenu().setVisible(true);
         this.setVisible(false);
   }
```



Form Name: Bill.Java

```
import java.sql.*;
import javax.swing.table.*;
import javax.swing.JOptionPane;
//import java.util.*;
import java.text.*;
import java.awt.print.*;
public class Bill extends javax.swing.JFrame {
   int bookingNo;
   /** Creates new form Bill */
   public Bill(int bno) {
      initComponents();
      bookingNo = bno;
      java.util.Date D = new java.util.Date();
      DateFormat df = DateFormat.getDateInstance(DateFormat.SHORT);
      dateLBL.setText(df.format(D));
         try {
         Class.forName("java.sql.Driver");
         String database = "jdbc:mysql://localhost:3306/Hotal";
         Connection conn = DriverManager.getConnection(database, "root",
"pace");
```

```
            Statement stmt = conn.createStatement();
            String sql = "select * from Booking where BookingNo = " + bookingNo;
            ResultSet rs = stmt.executeQuery(sql);
            Object[] newrow = new Object[8];
            if(rs.next())
            {
               newrow[0] = "1";
               newrow[1] = bookingNo + "";
               int rno = rs.getInt("RoomNo");
               newrow[2] = rno + "";
               newrow[4] = rs.getString("FromD");
               newrow[5] = rs.getString("ToD");
               newrow[6] = rs.getString("Advance");
               int Total  = rs.getInt("Total");
               newrow[7] = Total + "";
               TotalL.setText(Total + " /-");
               String sql2 = "select Charges from Room, Type where RoomNo = " +
rno + " and Room.TypeCode = Type.TypeCode";
               ResultSet rs2 = stmt.executeQuery(sql2);
               rs2.next();
               newrow[3] = rs2.getString(1);
               DefaultTableModel tm = (DefaultTableModel)billTBL.getModel();
               tm.addRow(newrow);
            }
         }
          catch (Exception e) { JOptionPane.showMessageDialog(null,"" + e);
         }
      }
private void BackBTNActionPerformed(java.awt.event.ActionEvent evt) {
         // TODO add your handling code here:
         new MainMenu().setVisible(true);
         this.setVisible(false);
}
```



Form Name: BookCancel.java

```
import java.sql.*;
import javax.swing.JOptionPane;
import java.util.*;
public class BookCancel extends javax.swing.JFrame {

    /** Creates new form BookCancel */
    int stayTime;
    int aMonth,dMonth;
    int aDay;
    int dDay;
    int aYear;
    int dYear;
    public BookCancel() {
        initComponents();
        BookingDetailsPart2Panel.setVisible(false);
        cancelBookingPanel.setVisible(false);
        EnterBookingDetailsPanel.setVisible(false);
        bookCancelOptionsPanel.setVisible(true);
        String m ="0";
        for(int i=1; i<=12; i++)
```

```
        {
          if(i>9)
            m="";
          Month.addItem(m+ i);
          Month1.addItem(m+ i);
        }
        ContinueBtn.setVisible(false);
        cancelBtn.setVisible(false);
    }
private void CancelBookingActionPerformed(java.awt.event.ActionEvent
evt) {
        // TODO add your handling code here:
        EnterBookingDetailsPanel.setVisible(false);
        BookingDetailsPart2Panel.setVisible(false);
        bookCancelOptionsPanel.setVisible(false);
        cancelBookingPanel.setVisible(true);
}

    private void BookingActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        BookingDetailsPart2Panel.setVisible(false);
        cancelBookingPanel.setVisible(false);
        bookCancelOptionsPanel.setVisible(false);
        EnterBookingDetailsPanel.setVisible(true);
}

    private void BackActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
}
    private int getmax(int month1 ,int month2, int d2)
    {
        if(month1 == month2)
            return d2;
```

```
    else if(month1 == 2)
       return 28;
    else if(month1==4 || month1==6 || month1==9 || month1==11)
       return 30;
    else
       return 31;
  }
  private int search(int month, int month2, int day1, int day2, String Tcode)
  {
    String avail="f";
    boolean found = false;
    int rNo = 0;
    int max = getmax(month,month2,day2);
    try {
       Class.forName("java.sql.Driver");
       String database = "jdbc:mysql://localhost:3306/Hotal";
       Connection conn = DriverManager.getConnection(database, "root",
"pace");
       Statement stmt = conn.createStatement();
       String sql = "select * from Status" + month + " where TypeCode = '" +
Tcode + "'";
       ResultSet rs = stmt.executeQuery(sql);
       while(rs.next())
       {
         int i;
         for(i=day1; i<=max; i++)
         {
           avail = rs.getString(i+2);

           if (avail.equals("b") || avail.equals("o"))
             break;
         }
         if(i == max+1)
         {
           rNo = rs.getInt(1);
           if(month != month2)
```

```
                found = search2(month+1,month2,1,day2,Tcode,rNo);
               else
                  break;
                if(found)
                  break;
            }
          }
          rs.close();
          stmt.close();
          conn.close();
       } catch (Exception e) { ReportLBL.setText("Incorrect Entry" + e);}
       return rNo;
    }
    private boolean search2(int month1 , int month2,int day1,int day2, String
Tcode , int rno)
    {
       String avail="f";
       boolean found = false;
       int rNo = 0;
       int max = getmax(month1,month2,day2);
       try {
          Class.forName("java.sql.Driver");
          String database = "jdbc:mysql://localhost:3306/Hotal";
          Connection conn = DriverManager.getConnection(database, "root",
"pace");
          Statement stmt = conn.createStatement();
          String sql = "select * from status" + month1 + " where TypeCode = '" +
Tcode + "' and RoomNo = " + rno;
          ResultSet rs = stmt.executeQuery(sql);
          rs.next();
            int i;
            for(i=day1; i<=max; i++)
            {
               avail = rs.getString(i+2);
               if (avail.equals("b") || avail.equals("o"))
                  break;
```

```
            }
            if(i == max+1)
            {
               if(month1 != month2)
                found = search2(month1+1,month2,1,day2,Tcode,rNo);
               else
                  return true;
            }
            rs.close();
            stmt.close();
            conn.close();
      } catch (Exception e) { ReportLBL.setText("Incorrect Entry");}
      return found;
   }
   private void SearchBtnActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
      ReportLBL.setText("  ");
      boolean found = false;
      ContinueBtn.setVisible(false);
      int roomNo=0;
      int month = Integer.parseInt(Month.getSelectedItem().toString());
      aMonth=month;
      int month2 = Integer.parseInt(Month1.getSelectedItem().toString());
      dMonth=month2;
      int day1 = Integer.parseInt(Date.getSelectedItem().toString());
      aDay=day1;
      int day2 = Integer.parseInt(Date1.getSelectedItem().toString());
      dDay=day2;
      int y1 = Integer.parseInt(year.getSelectedItem().toString());
      aYear=y1;
      int y2 = Integer.parseInt(year1.getSelectedItem().toString());
      dYear=y2;
      char avail = 'n';
      String Tcode = TCode.getSelectedItem().toString();
       roomNo = search(month,month2,day1,day2,Tcode);
      if(roomNo ==0)
```

```
          ReportLBL.setText("No Room available.");
         else
         {
              ReportLBL.setText("Room No. " + roomNo + " is Available. Click
continue to book the room.");
              ContinueBtn.setVisible(true);
              RNoLBL.setText(roomNo +"");
              ArrivalTF.setText(""+y1 +"/"+month + "/" + day1);
              DepartureTF.setText(""+y2 +"/"+month2 + "/" + day2);
         }
        Calendar c = Calendar.getInstance();
        c.set(y1,month,day1);
        Calendar c2 = Calendar.getInstance();
        c2.set(y2,month2,day2);
        stayTime = (int)((c2.getTimeInMillis() -
c.getTimeInMillis())/(1000*60*60*24));
        Stay.setText(""+stayTime);
}

   private void continueBtnActionPerformed(java.awt.event.ActionEvent evt)
{
       // TODO add your handling code here:
       cancelBtn.setVisible(false);
       int bno =Integer.parseInt( BookingNoTF.getText());
       try {
          Class.forName("java.sql.Driver");
          String database = "jdbc:mysql://localhost:3306/Hotal";
          Connection conn = DriverManager.getConnection(database, "root",
"pace");
          Statement stmt = conn.createStatement();
          String sql = "select RoomNo, FromD, ToD from Booking where
BookingNo = " + bno ;
          ResultSet rs = stmt.executeQuery(sql);
          if(rs.next())
          {
            int rno = rs.getInt("RoomNo");
```

```
            Calendar c = Calendar.getInstance();
            Calendar c2 = Calendar.getInstance();
            c.setTime(rs.getDate(2));
            c2.setTime(rs.getDate(3));
            int month1 = c.get(Calendar.MONTH) + 1;
            int month2 = c2.get(Calendar.MONTH) + 1;
            int day1 = c.get(Calendar.DATE);
            int day2 = c2.get(Calendar.DATE);
            while(month1<=month2)
             {
                int max=getmax(month1,month2,day2);
                int min=0;
                if(month1==month2)
                   min=day1;
               else
                  min=1;
               for(int d=min;d<=max;d++)
               {
                   String sql3 = "update Status" + month1 + " set D" + d + " = 'f'
where RoomNo = " + rno;
                   stmt.executeUpdate(sql3);
               }
               month1++;
             }
            error1.setText("Click continue to genrate calcelation slip");
            cancelBtn.setVisible(true);
          }
          else
          {
             error1.setText("Unable to find booking number");
          }
          stmt.close();
          conn.close();
       } catch (Exception e) { error1.setText("Unable to find booking number");
          JOptionPane.showMessageDialog(null,"Invalid Data" + e);
       }
```

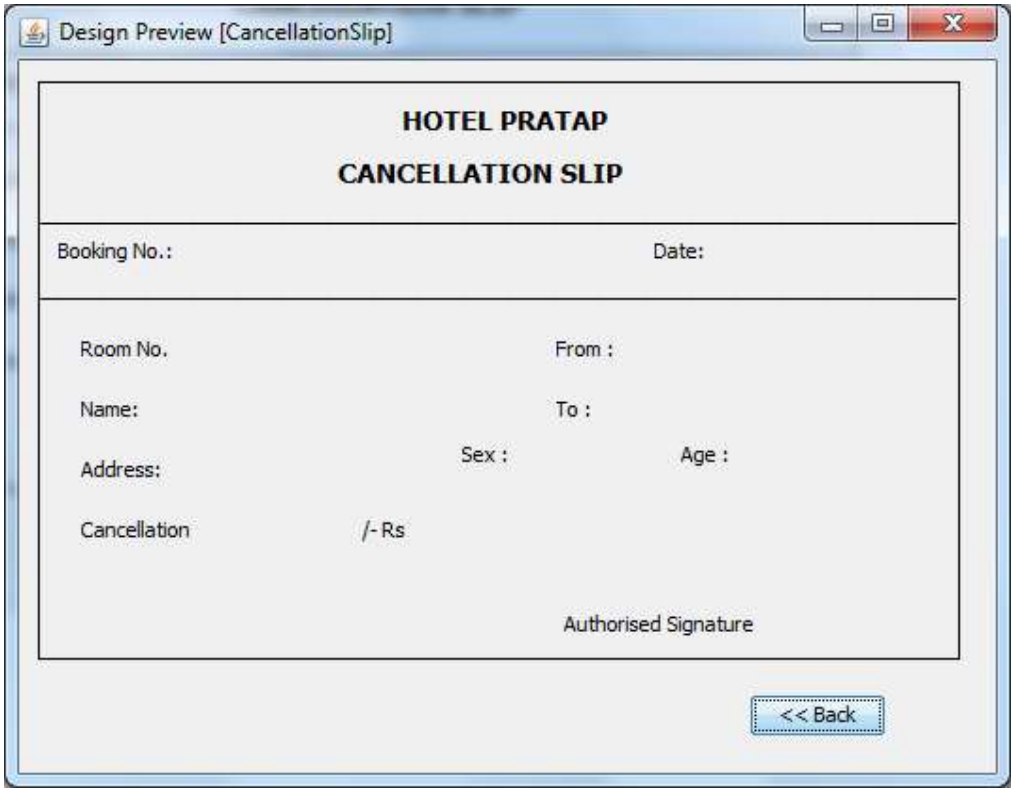
```
}

    private void BookingFocusLost(java.awt.event.FocusEvent evt) {
        // TODO add your handling code here:
}

    private void MonthItemStateChanged(java.awt.event.ItemEvent evt) {
        // TODO add your handling code here:
        Date.removeAllItems();
         String m="0";
        int mon =0,days=0;
        int yr = Integer.parseInt(year.getSelectedItem().toString());
        if(Month.getSelectedIndex()>=1)
        {
            mon = Integer.parseInt(Month.getSelectedItem().toString());
        }
        if(mon==2)
          if(yr%4 != 0)
            days = 28;
          else
             days =29;
        else if( mon==4 || mon ==6 || mon==9 || mon==11)
             days = 30;
        else
            days = 31;
        for(int i =1; i<=days ;i++)
        {
            if(i>9)
               m="";
            Date.addItem(m+i);
        }
    }

    private void Month1ItemStateChanged(java.awt.event.ItemEvent evt) {
            Date1.removeAllItems();
         String m="0";
```

```
        int mon =0,days=0;
        int yr = Integer.parseInt(year1.getSelectedItem().toString());
        if(Month1.getSelectedIndex()>=1)
        {
           mon = Integer.parseInt(Month1.getSelectedItem().toString());
        }
        if(mon==2)
          if(yr%4 != 0)
            days = 28;
          else
             days =29;
        else if( mon==4 || mon ==6 || mon==9 || mon==11)
            days = 30;
        else
           days = 31;
        for(int i =1; i<=days ;i++)
        {
           if(i>9)
              m="";
           Date1.addItem(m+i);
        }
    }

    private void ContinueBtnActionPerformed(java.awt.event.ActionEvent
evt) {
        // TODO add your handling code here:
        String code = TCode.getSelectedItem().toString();
        try {
           Class.forName("java.sql.Driver");
           String database = "jdbc:mysql://localhost:3306/Hotal";
           Connection conn = DriverManager.getConnection(database, "root",
"pace");
           Statement stmt = conn.createStatement();
           String sql = "select Charges from Type where TypeCode = '" + code +
"'";
           ResultSet rs = stmt.executeQuery(sql);
```

```
            rs.next();
            int charge = rs.getInt("Charges");
            charge = charge * stayTime;
            totalChargesLBL.setText(charge+"");
            rs.close();
            stmt.close();
            conn.close();
        } catch (Exception e) { }
        EnterBookingDetailsPanel.setVisible(false);
        cancelBookingPanel.setVisible(false);
        BookingDetailsPart2Panel.setVisible(true);
}

    private void BookBTNActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        char gender = 'n';
        int month=aMonth;
        if(MaleRB.isSelected())
            gender = 'm';
        else if(FemaleRB.isSelected())
            gender = 'f';
        int age = Integer.parseInt(AgeTF.getText());
        int rno =Integer.parseInt(RNoLBL.getText());
        int advance =Integer.parseInt(AdvanceTF.getText());
        int tot =Integer.parseInt(totalChargesLBL.getText());
        try
        {
            Class.forName("java.sql.Driver");
            String database = "jdbc:mysql://localhost:3306/Hotal";
            Connection conn = DriverManager.getConnection(database, "root",
"pace");
            Statement stmt2 = conn.createStatement();
            String sql2 = "Select max(BookingNo) from Booking";
            ResultSet rs = stmt2.executeQuery(sql2);
            rs.next();
            int bno = rs.getInt(1)+1;
```

```
        Statement stmt = conn.createStatement();
        String sql = "insert into Booking values (" + bno + ", '" +
nameTF.getText() + "' , '" + AddressTF.getText() + "' , '" + gender + "' , "+ age +
" , " + rno + " , '" + ArrivalTF.getText() + "' , '" + DepartureTF.getText() + "' , " +
advance + " , " + tot + " )" ;
        stmt.executeUpdate(sql);
        while(month<=dMonth)
        {
           int max=getmax(month,dMonth,dDay);
           int min=0;
           if(month==aMonth)
              min=aDay;
           else
               min=1;
           for(int d=min;d<=max;d++)
           {
             String sql3 = "update status" + month + " set D" + d + " = 'b' where
RoomNo = " + rno;
             stmt.executeUpdate(sql3);
           }
           month++;
         }
        JOptionPane.showMessageDialog(null,"Room booked. Booking
number is: "+ bno);
        stmt.close();
        stmt2.close();
        conn.close();
        new ReservaTionSlip(bno).setVisible(true);
        this.setVisible(false);
      }
catch (Exception e) { JOptionPane.showMessageDialog(null,"Invalid Data" +
e); }
}

   private void cancelBtnActionPerformed(java.awt.event.ActionEvent evt) {
      // TODO add your handling code here:
```

```
        int bookingNo =Integer.parseInt( BookingNoTF.getText());
        new CancellationSlip(bookingNo).setVisible(true);
        this.setVisible(false);

}

    private void
back_MainMItemActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        MainMenu m = new MainMenu();
        m.setVisible(true);
        this.setVisible(false);
}

    private void
back_LogoutMItemActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
       // new login().setVisible(true);
        this.setVisible(false);
}

    private void edit_BookMItemActionPerformed(java.awt.event.ActionEvent
evt) {
        BookingDetailsPart2Panel.setVisible(false);
        cancelBookingPanel.setVisible(false);
        bookCancelOptionsPanel.setVisible(false);
        EnterBookingDetailsPanel.setVisible(true);
}

    private void
edit_CancelMItemActionPerformed(java.awt.event.ActionEvent evt) {
        EnterBookingDetailsPanel.setVisible(false);
        BookingDetailsPart2Panel.setVisible(false);
        bookCancelOptionsPanel.setVisible(false);
        cancelBookingPanel.setVisible(true);
}
```



Form Name: CancellationSlip.java

```
import java.sql.*;
import javax.swing.JOptionPane;
import java.text.*;
public class CancellationSlip extends javax.swing.JFrame {
   int bookingNo;
   /** Creates new form CancellationSlip */
   public CancellationSlip(int bno) {
      initComponents();
      bookingNo =bno;
      BNoL.setText(bno + "");
      java.util.Date D = new java.util.Date();
      DateFormat df = DateFormat.getDateInstance(DateFormat.SHORT);
      dateL.setText(df.format(D));
         try {
         Class.forName("java.sql.Driver");
         String database = "jdbc:mysql://localhost:3306/Hotal";
         Connection conn = DriverManager.getConnection(database, "root",
"pace");
```

```
            Statement stmt = conn.createStatement();
            String sql = "select * from Booking where BookingNo = " + bno;
            ResultSet rs = stmt.executeQuery(sql);
            if(rs.next())
            {
               RNoL.setText(rs.getString("RoomNo"));
               NameL.setText(rs.getString("CustName"));
               AddressL.setText(rs.getString("Address"));
               FromL.setText(df.format(rs.getDate("FromD")));
               ToL.setText(df.format(rs.getDate("ToD")));
               String s = rs.getString("Sex");
               if(s.equals("m"))
                  s = "Male";
               else
                  s = "Female";
               SexL.setText(s);
               AgeL.setText(rs.getString("Age"));
               int tot = rs.getInt("Total");
               int fee = (int)(tot * 0.1);
               CanL.setText(fee + "");
            }
            String sqld = "delete from Booking where BookingNo = " +
bookingNo;
            stmt.executeUpdate(sqld);
            stmt.close();
            conn.close();
         }
          catch (Exception e) { JOptionPane.showMessageDialog(null,"" + e);
         }
      }
private void BackBTNActionPerformed(java.awt.event.ActionEvent evt) {
         // TODO add your handling code here:
         new MainMenu().setVisible(true);
         this.setVisible(false);
}
```

References

*In order to work on this project titled –**Hotel Management,** the following order of spots material are referred by me during the various phases of development of the project.*

(1) The Complete Reference Java 2.0

-by Shildit

(2)MySQL, Black Book

-by Steven Holzner

(2) Understanding SQL

– Gruber

(3) http://www.mysql.org/

(4) http://www.netbeans.org/

(5) On-line Help of NetBeans ®

(6) Information Technology for class XII

-by Sumita Arora

(7) Together with Information Technology

(6) Various Websites of Discussion Forum and software development activities.

Other than the above-mentioned books, the suggestions and supervision of my teacher and my class experience also helped me to develop this software project.

R.S.M. Public School

Supaul (Bihar)

A Practical File

on

1. SQL Commands
2. Java Programs

For

AISSCE 2023-2024 Examination

[As a part of the Information Technology Course (802)]

SUBMITTED BY

.....

[Roll No.....]

SQL Commands Practical

Objective: Understanding the use of MySQL queries.

1 Create and open Database named MYORG.
Ans: Create database MYORG;
Use MYORG;

2 Write a command to display the name of current month.
Ans: Select month(curdate());

3 Write commands to display the system date.
Ans:select sysdate;

4 Write a query to find out the result of 63.
Ans: select pow(6,3);

5 Write command to show the Tables in the MYORG Database.
Ans: Use MYORG;
Show tables;

DEPT

DeptID	DeptName	MgrID	Location
10	SALES	8566	Mumbai
20	PERSONEL	8698	Delhi
30	ACCOUNTS	8882	Delhi
40	RESEARCH	8839	Banglore

6 Add one column State of data type VARCHAR and size 30 to table DEPT
Ans: alter table DEPT
Add(state varchar(30));

7 Create a table name **EMP** with following structure

Column Name	EmpID	EmpName	Designation	DOJ	sal	comm	DeptID
Data Type	integer	Varchar (30)	Char(10)	Date	integer	integer	integer
Constraint	Primary Key	not null			Check> 1000		Foreign Key

Ans: create table emp
(EmpID integer primary key,
EmpName varchar(30) not null,
Designation char(10),
DOJ date,
Sal integer check(sal>1000),
Comm integer,
DeptID integer,
Foreign key(DeptID) references DEPT(DeptID));

EMP

EmpID	EmpName	Designation	DOJ	Sal	comm	DeptID
8369	SMITH	CLERK	18-12-1990	1050.00	200.00	10
8499	ANYA	SALESMAN	20-02-1991	1600.00	300.00	20
8566	MAHADEVAN	MANAGER	02-04-1991	2985.00	NULL	30
8654	MOMIN	SALESMAN	28-09-1991	1250.00	400.00	20
8698	BINA	MANAGER	05-01-1991	2850.00	250.00	30
8882	SHIVANSH	MANAGER	09-06-1991	2450.00	NULL	10
8888	SCOTT	ANALYST	09-12-1992	3000.00	150.00	10
8839	AMIR	PRESIDENT	18-11-1991	5000.00	NULL	20
8844	KULDEEP	SALESMAN	08-04-1992	1500.00	0.00	30

8 Insert the first record in table emp.
Ans: insert into emp
Values(8369,'SMITH','CLERK','18-12-1990',800,200,10);

9 Write a query to display EmpName and Sal of employees whose salary are greater than or equal to 2200
Ans: select empname, sal
from emp
where sal>=2200;

10 Write a query to display details of employees who are not getting commission.
Ans: select *
from emp
where comm is NULL;

11 Write a query to display employee name and salary of those employees who don't have their salary in range of 2500 to 4000.
Ans: select empname, sal
From emp
Where sal not between 2500 and 4000;

12 Write a query to display the name of employee whose name contains "A" as third alphabet in Ascending order of employee names.

```
Ans: select empname
From emp
Where empname like "__A%"
Order by empname;
```

13 Display the sum of salary and commission of employees as "Total Incentive" who are getting commission

```
Ans: select sal+comm As "Total Incentive"
From emp
where comm is not NULL;
```

14 Show the average salary for all departments with more than 5 working people.

```
Ans: select avg(sal)
From emp
Group by deptid
Having count(*)>5;
```

15 Display the distinct designation offered by the Organization.

```
Ans: select distinct designation
From emp;
```

16 List the count of Employees grouped by DeptID.

```
Ans: select count(*)
From emp
Group by DeptID;
```

17 Display the names of employees who joined on or after 01/05/1991.

```
Ans: Select empname
From emp
Where DOJ>='01/05/1991';
```

18 Display the employee records in order by DOJ.

```
Ans: select *
From emp
Order by DOJ;
```

19 Display the maximum salary of employees in each Department.

```
Ans: select max(sal)
From emp
Group by department;
```

20. Update all the records as add 'Mr.' with EmpName.

```
Ans: update emp
Set EmpName=concat('Mr',EmpName);
```

Java programs

1. Calculate the area of the rectangle

```
public class Rectangle
{
public static void main(String args[])
{
double width=15.5;
double height=10.75;
double area=width*height;
System.out.println("Widht of Rectangle is "+width);
System.out.println("Height of Rectangle is "+height);
System.out.println("Area of rectangle is "+area);
}
}
```

2. Find the volume of the cube

```
public class volOfCube
{
public static void main(String args[])
{
int s, volume;
s=4;
volume=s*s*s;
System.out.println("Side of the Cube is: "+s);
System.out.println("Volume ot Cube will be: "+volume);
}
}
```

3.,Calculate the CGPA Percentage from Subjects CGPA.

```
public class CGPApercentage
{
public static void main (String args[])
{
double Eng, Hin, Maths, Sci, SS, Tot, CGPA, CGPAper ;
Eng = 9.5;
Hin = 8.5;
Maths = 9.5;
Sci =9.6;
SS = 8.6;
Tot = Eng + Hin + Maths + Sci + SS;
CGPA = Tot/5;
CGPAper = (float)(9.5 * (CGPA));
System.out.println("Subject Wise CGPA Details");
System.out.println("=================");
System.out.println("English:\t"+Eng);
System.out.println("Hindi:\t"+Hin);
System.out.println("Maths:\t"+Maths);
System.out.println("Science:\t"+Sci);
System.out.println("Soc.Sci.:\t"+SS);
System.out.println("=================");
System.out.println("CGPA:\t"+CGPA);
System.out.println("=================");
System.out.println("CGPA %age:\t"+CGPAper);
System.out.println("=================");
}
}
```

4. Convert Temperature from Celsius to Fahrenheit.

```
public class Temperature
{
public static void main (String args[])
{
double F, C;
C = 27;
F = C * 1.8 + 32;
System.out.println("Temperature in Celsius is : "+C);
System.out.println("Temperature in Fahrenheit is: "+F);
}
}
```

5. Convert Temperature from Fahrenheit to Celsius.

```
public class TemperatureF2C
{
public static void main (String args[])
{
double F, C;
F = 104;
C = (F - 32) / 1.8;
System.out.println("Temperature in Fahrenheit is: "+F);
System.out.println("Temperature in Celsius is : "+C);
}
}
```

6. Simple Interest Calculation Program

```
public class SimpleInterest
{
public static void main(String args[])
{
int p, n;
float r;
long i,a;
p=150000;
r=5.5f;
n=30;
i=(long)(p*r*n*0.01);
a=p+i;
System.out.println("Simple Interest Calculator Program");
System.out.println("========================");
System.out.println("Principal: "+p);
System.out.println("Rate: "+r+"%");
System.out.println("Years: "+n+" years.");
System.out.println("Interest: "+i);
System.out.println("Amount : "+a);
System.out.println("\nYearly Interest: "+i/n);
}
}
```

7. Student is Pass or Not using if/ else statement.

```
public class ifDemo
{
public static void main(String args[])
{
int marks;
marks=50;
System.out.println("Your marks are "+marks);
if(marks>=35)
{
System.out.println("So, you are Pass");
}
```

```
else
{
System.out.println("So, you are Fail");
}
}
}
```

8. Maximum of two numbers using if/ else statement

```
public class ifDemo2
{
public static void main(String args[])
{
int n1, n2,max;
n1=150;
n2=75;
if(n1>n2)
{
max=n1;
}
else
{
max=n2;
}
System.out.println("The Maximum is "+max);
}
}
```

9. No. is Odd or Even using if/ else statement.

```
public class ifDemo3
{
public static void main(String args[])
{
int n1;
n1=18;
if(n1%2==1)
{
System.out.println("The Number "+n1+" is odd number");
}
else
{
System.out.println("The Number "+n1+" is even number");
}
}
}
```

10. Maximum of three numbers using multiple if statement

```
public class multipleIfDemo
{
public static void main(String args[])
{
int n1, n2, n3, max;
n1=150;
n2=75;
n3=700;
max=0;
if(n1>n2 && n1>n3)
{
max=n1;
}
if(n2>n1 && n2>n3)
{
max=n2;
}
```

```
if(n3>n1 && n3>n2)
{
max=n3;
}
System.out.println("The Maximum is "+max);
}
}
```

11. Print the Day of Week using else if ladder.

```
//Find the Day of the Week
public class elseIfLadderDemo2
{
public static void main(String args[])
{
int d;
d=1;
System.out.print("The Day "+d+" is: ");
if(d==1)
System.out.println("Monday");
else if(d==2)
System.out.println("Tuesday");
else if(d==3)
System.out.println("Wednesday");
else if(d==4)
System.out.println("Thursday");
else if(d==5)
System.out.println("Friday");
else if(d==6)
System.out.println("Saturday");
else if(d==7)
System.out.println("Sunday");
else
System.out.println("Wrong Input");
}
}
```

12. Print Numbers from 1 to N using for loop.

```
//Example of Loop
public class Loop1
{
public static void main(String args[])
{
int i, n;
n=15;
for(i=1;i<=n;i++)
{
System.out.println(i);
}
System.out.println("\nEnd of Program.");
}
}
```

13. Print Table of N using for loop.

```
public class Loop2
{
public static void main(String args[])
{
int i, n=15;
for(i=1;i<=10;i++)
{
System.out.println(n+" x "+i+" = "+n*i);
```

```
}
}
}
```

14. Print the Sum of 1 to N using for Loop.

```
public class Loop3
{
public static void main(String a[])
{
int i,n,sum=0;
n=70;
for(i=1;i<=n;i++)
{
sum+=i;
}
System.out.println("The Sum from 1 to "+n+" is "+sum);
}
}
```

15. Check whether the number is Prime or Not using while loop.

```
class prime
{
public static void main(String []a)
{
int i, n=45, c=0;
i=2;
while(i<n)
{
if(n%i==0)
c++;
i++;
}
if(c==0)
System.out.println("The number "+n+" is prime");
else
System.out.println("The number "+n+" is not prime");
}
}
```