# **INDEX**

- 1. Introduction
- 2. Analysis
- 3. Design
  - 3.1. Table Structure
  - 3.2. Sample Data
- 4. Activities
  - 4.1.Login Screen
  - 4.2.HotelManagement
  - 4.3.Add New Customer
  - 4.4.Details of Existing Customer
  - 4.5. Delete a Booking
  - 4.6. Room Availability
  - 4.7. Details of Previous Customer
- 5. Bibliography

#### 1. Introduction

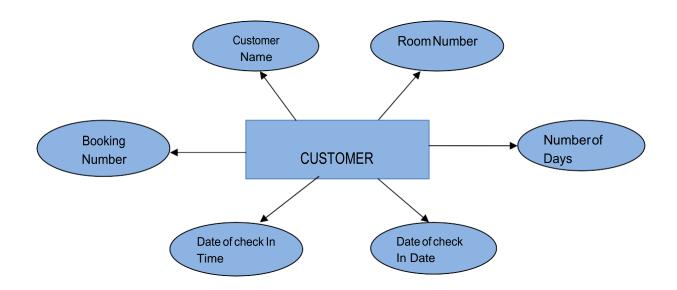
This project is based on a GUI application used in hotel management system. The application contains many jFrameForms used to manage data through database connectivity. The application is connected to a database in mysql. The database contains two tables which contain records of customers. The application can be used to add new customer entry which contains details like name, phone number, booking number, room type, etc. Details of all present and previous customers can be obtained along with details of date and time of entry. During check out existing entries can be deleted. Room availability can be also checked through this application.

Thus, application is very much useful in managing the data records of customers in the hotel.

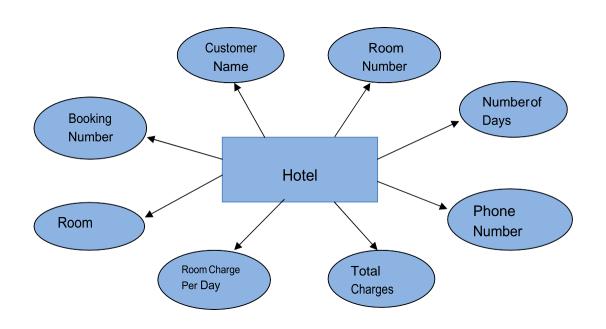
## 2. Analysis and Design:

## **ENTITIES**

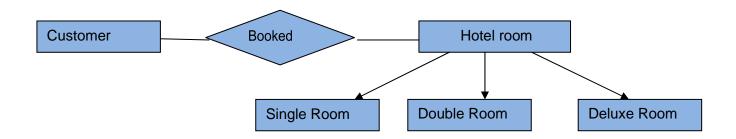
#### Customer



#### Hotel



# E-R DIAGRAM (Entity relationship diagram)



## 3. Design

Following Technology is used to develop this system

Database : MySQL Community Server (GPL) – Version 5.5.17

Software/Language: NetBeans IDE 8.2

#### Database Design:

This project contain following two tables

Hotel

Customer

The structure of tables is as follow

#### 3.1. Table Structure

Table: Hotel

Table: Customer

Table: Admin

+   Field	21	Null	   Key	Default	++   Extra
admin_id   Username			į į	NULL NULL NULL	

## 3.2. Sample Table Data

mysql> select	* from ho	otel;				4	
booking_no	name	phno	roomno	roomtype	NODays	PDC	TA
1 3 4 57 8 11 12	<pre>\ \name \ \ \name \name \ \ \name \name \ \ \name \na</pre>	NULL NULL NULL NULL NULL 8895632144 9874561233	2 3 4 5 7 8 6 1	Single Single Double Double Deluxe Deluxe Double Single	NULL NULL NULL NULL NULL NULL 2 2	NULL   NULL   NULL   NULL   NULL   NULL   4000	NULL NULL NULL NULL NULL NULL 8000 4000
8 rows in set	(0.00 sed	:)					·

mysql> se	elect * fro	m custome	^;		
Name	book_no	room_no	dateofentry	ltime	i NOD i
Manav   Mudit   Vidit   Harsh	11 12 13 15	<u>1</u> 5	2017-12-03	20:23:20   19:59:54   20:02:02   20:22:19	i <u>ī</u> i
4 rows in	n set (0.00	sec)			<del></del>

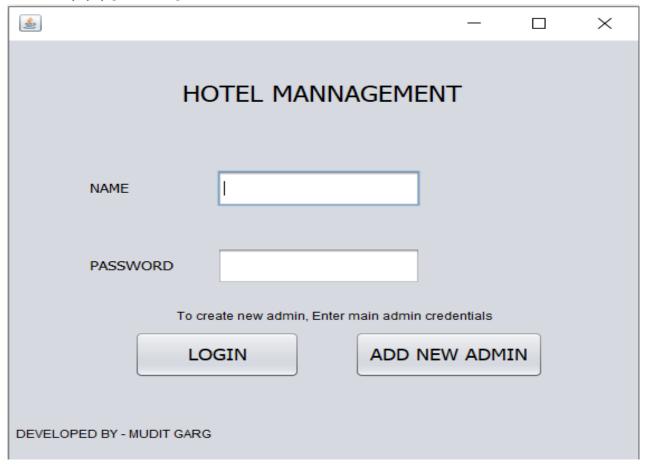
#### 4. Activities

#### 4.1. Login Screen

Initially Hotel staff have to login into system using this screen It contain two input field User name and the password.

New Admin can be also be created.

#### 4.1.1. Screen Shot



#### 4.1.2. code

java.sql.Connection con =

```
Statement stmt = (Statement) con.createStatement();
             String query = "select * from admin;";
            ResultSet rs = stmt.executeQuery(query);
            int t = 0;
            while (rs.next()) {
               String name = rs.getString("Username");
               String pass = rs.getString("Password");
               if (a.equals(name) && b.equals(pass)) {
                 this.setVisible(false);
                 Hotel_Mannagement n = new Hotel_Mannagement();
                 n.setVisible(true);
                 t = 1;
                 break;
               }
            }
            if(t == 0){
               JOptionPane.showMessageDialog(this,"Incorrect Username or Password");
               ¡TextField1.setText("");
               jTextField2.setText("");
            }
          } catch (Exception e) {
            JOptionPane.showMessageDialog(this, e.getMessage());
          }
       } else {
          JOptionPane.showMessageDialog(this, "Please enter Username and Password");
}
```

DriverManager.getConnection("jdbc:mysql://localhost:3306/mudit", "root", "madhu304");

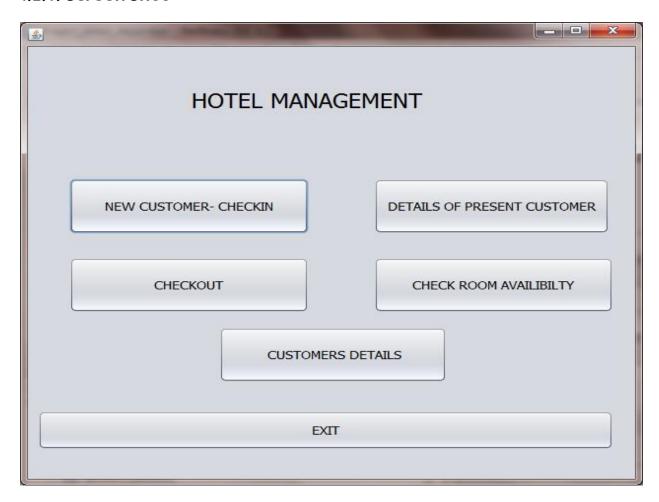
#### 4.2. Hotel Management

This is main screen for Hotel Management system. It contain following main sub function

- ✓ New Customer Check in
- ✓ Details of present Customer
- ✓ Checkout
- ✓ Check room Availability
- ✓ Customer Details
- ✓ Exit

Functionality of each function will explain in further in this document.

#### 4.2.1. Screen Shot



#### 4.2.2. Code

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
//EXIT BUTTON
 System.exit(0);
    // TODO add your handling code here:
  }
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
//NEW CUSTOMERBUTTON
    this.setVisible(false);
    Newcustomer n = new Newcustomer();
    n.setVisible(true);
  }
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
   //DETAILS OF ALL present CUSTOMERS BUTTON
    this.setVisible(false);
    DETAILS m = new DETAILS();
    m.setVisible(true);
  }
  private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
  //DELETE BUTTON
   this.setVisible(false);
    Delete d = new Delete();
    d.setVisible(true);
  }
  private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
    //ROOM AVALAIBILTY BUTTON
    this.setVisible(false);
    room_availaible d = new room_availaible();
    d.setVisible(true);
```

```
// TODO add your handling code here:
}
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
    //DETAILS OF ALL PREVIOUS CUSTOMERS BUTTON
    this.setVisible(false);
    alldetails d = new alldetails();
    d.setVisible(true);
// TODO add your handling code here:
}
```

#### 4.3. Add New Customer

This Screen is used for Adding new customer in the hotel management system.

#### 4.3.1. Screen Shot



#### 4.3.2. Code

private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) { //ROOMAVAILAIBILITY BUTTON

DefaultTableModelmodel=(DefaultTableModel)jTable1.getModel(); int I =model.getRowCount();

```
for (int i = 0; i < l; i++)
   {
     model.removeRow(0);
   }
   try {
      Class.forName("java.sql.Driver");
     java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your_database_name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select roomtype,roomno from hotel where name='<name>' order
by roomno;";
      ResultSet rs =stmt.executeQuery(query);
      while (rs.next())
        String roomtype = rs.getString("roomtype");
        int roomno = rs.getInt("roomno");
        model.addRow(new Object[]{roomtype, roomno});
     }
     int a = model.getRowCount();
      JOptionPane.showMessageDialog(null, "There are " + a + " rooms available ");
   catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
     JOptionPane.showMessageDialog(this, e.getMessage());
   }
   // TODO add your handling code here:
 }
```

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
//CALCULATE AMOUNT BUTTON
    int k:
    String c = jComboBox1.getSelectedItem().toString();
    int nod = Integer.parseInt(jTextField5.getText());
    if (c.equals("Single")) {
      k = 2000;
      ¡TextField7.setText(Integer.toString(k * nod));
      jTextField6.setText("2000");
    } else if (c.equals("Double")) {
      k = 4000;
      ¡TextField7.setText(Integer.toString(k * nod));
      ¡TextField6.setText("4000");
    } else if (c.equals("Deluxe")) {
      k = 6000;
      jTextField7.setText(Integer.toString(k * nod));
      ¡TextField6.setText("6000");
    }
    ¡Button1.setEnabled(true);
    // TODO add your handling code here:
  }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
//SAVE BUTTON
try {
  Class.forName("java.sql.Driver");
  java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
  int g, k = 0;
  String rt;//room type
  rt = jComboBox1.getSelectedItem().toString();
  switch (rt) {
```

```
case "Single":
    k = 2000;
    break:
  case "Double":
    k = 4000;
    break;
  case "Deluxe":
    k = 6000;
    break;
  default:
    break;
}
¡TextField6.setText("" + k);
String b = jTextField1.getText();//name
int a = Integer.parseInt(jTextField2.getText());//booking no
Long c = Long.parseLong(jTextField3.getText());//phno
int d = Integer.parseInt(jTextField4.getText());//room no
int e = Integer.parseInt(jTextField5.getText());// no of days
q = k * e;
jTextField7.setText("" + g);
Statement stmt = (Statement) con.createStatement();
String query = "select name from hotel where roomno="+d+";";
String query1 = "select*from customer where book_no="+a+";";
ResultSet rs2 = stmt.executeQuery(query1);
if(rs2.next())
  JOptionPane.showMessageDialog(null, "Booking number is used before");
else
{
  ResultSet rs = stmt.executeQuery(query);
  if (rs.next())
    String n = rs.getString("name");
    if (n.equals("<name>"))
```

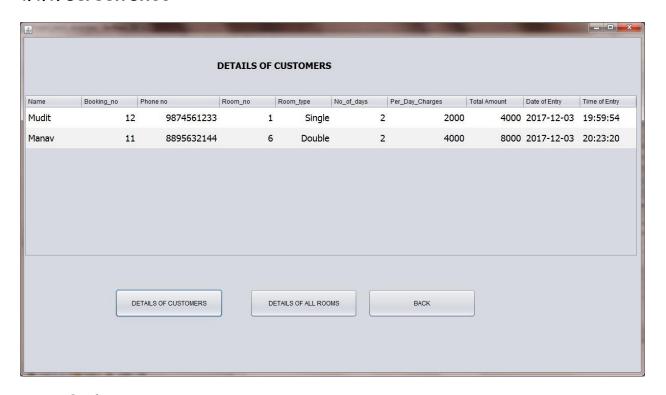
```
String query2 = "update hotel set booking_no=" + a + ",name="" + b +
"',phno='"+c+"',NODays="+e+",PDC="+k+",TA="+g+"where roomno="+d+"
and roomtype="" + rt + "" order by roomno;";
        stmt.executeUpdate(query2);
        JOptionPane.showMessageDialog(null, query2);
        ResultSet rs1 = stmt.executeQuery(query);
        if (rs1.next())
          n = rs1.getString("name");
          if (n.equals("<name>"))
          {
            JOptionPane.showMessageDialog(null, "room" + d + " is not availaible for
selected room type");
          } else
          {
            String guery3 = "insert into customer values('"+b+"',"+a+","+d+
",curdate(),curtime()," + e + ");";
            stmt.executeUpdate(query3);
            JOptionPane.showMessageDialog(null, "Saved Successfully");
          }
        }
      }
      else
      {
        JOptionPane.showMessageDialog(null, "Room is not availaible");
      }
    }
  }
  stmt.close();
  con.close();
}
```

```
catch (Exception e)
  JOptionPane.showMessageDialog(this, e.getMessage());
  JOptionPane.showMessageDialog(this, "enter correct value");
}
¡Button1.setEnabled(false);
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
//CLEAR BUTTON
    jTextField1.setText("");
    ¡TextField2.setText("");
    jTextField3.setText("");
    jTextField4.setText("");
    ¡TextField5.setText("");
    jTextField6.setText("");
    jTextField7.setText("");
    // TODO add your handling code here:
  }
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
  //BACK BUTTON
    this.setVisible(false);
    Hotel_Mannagement d = new Hotel_Mannagement();
    d.setVisible(true);
    // TODO add your handling code here:
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
//EXIT BUTTON
System.exit(0);
    // TODO add your handling code here:
  }
```

#### 4.4. Details of present Customer

This screen use for searching detail of present customer's staying in hotel.

#### 4.4.1. Screen Shot



#### 4.4.2. Code

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    //DETAILS OF ALL CUSTOMERS BUTTON
    DefaultTableModeImodeI1=(DefaultTableModeI)jTable1.getModeI();

int I = modeI1.getRowCount();

for (int i = 0; i < I; i++)
    {
        modeI1.removeRow(0);
    }
    try
    {
</pre>
```

```
Class.forName("java.sql.Driver");
      java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select * from hotel, customer where not hotel.name='<name>'
and booking_no=book_no order by roomno;";
      ResultSet rs =stmt.executeQuery(query);
      while (rs.next()) {
        String name = rs.getString("name");
        int Book = rs.getInt("booking no");
        String phno = rs.getString("phno");
        introomno = rs.getInt("roomno");
        String roomtype = rs.getString("roomtype");
        int nod = rs.getInt("NODays");
        int pdc = rs.getInt("PDC");
        int ta = rs.getInt("TA");
        String date = rs.getString("dateofentry");
        String time = rs.getString("time");
        model1.addRow(new Object[]{name, Book, phno, roomno, roomtype, nod,
pdc, ta, date, time});
      }
    catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
    // TODO add your handling code here:
```

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
//DETAILS OF ALL ROOMS BUTTON
    DefaultTableModelmodel1=(DefaultTableModel);Table1.getModel();
    int I = model1.getRowCount();
    for (int i = 0; i < l; i++)
      model1.removeRow(0);
    jTable1.getModel();
    try {
      Class.forName("java.sql.Driver");
      java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select * from hotel order by roomno;";
      ResultSet rs = stmt.executeQuery(query);
      while (rs.next()) {
        String name = rs.getString("name");
        int Book = rs.getInt("booking_no");
        String phno = rs.getString("phno");
        introomno = rs.getInt("roomno");
        String roomtype = rs.getString("roomtype");
        int nod = rs.getInt("NODays");
        int pdc = rs.getInt("PDC");
        int ta = rs.getInt("TA");
        model1.addRow(new Object[]{name, Book, phno, roomno, roomtype, nod,
pdc, ta});
      }
```

```
}
catch (Exception e)
{
    JOptionPane.showMessageDialog(null, "error");
    JOptionPane.showMessageDialog(this, e.getMessage());
}

// TODO add your handling code here:
}
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
    //BACK BUTTON
    this.setVisible(false);
    Hotel_Mannagement d = new Hotel_Mannagement();
    d.setVisible(true);
    // TODO add your handling code here:
}
```

#### 4.5. Checkout

When customer checkout the hotel , User can Delete the Entry from present customer record.

#### 4.5.1. Screen Shot

		Check Out	name Booking no's
		CHECK OUL	Mudit 12
			Manav 11
NAME	Manav		
Booking No.	11		
Phone No.	8895632144		BOOKING NO's
Room No.	6		SEARCH
Room TYPE	Double		
No of Days	2		CheckOut
Per Day Charges	4000		BACK
Total Amount	8000		EXIT

#### 4.5.2. Code

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) { //BOOKING NO BUTTON

DefaultTableModelmodel=(DefaultTableModel)jTable1.getModel(); int I = jTable1.getRowCount();

```
for(int i=0;i<1;i++)
    {
      model.removeRow(0);
    }
    try {
      Class.forName("java.sql.Driver");
      java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select Booking_no,name from hotel where not name='<name>'
order by roomno;";
      ResultSet rs =stmt.executeQuery(query);
      while (rs.next())
        int Book = rs.getInt("booking_no");
        String name = rs.getString("name");
        model.addRow(new Object[]{name, Book});
      }
    } catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
    // TODO add your handling code here:
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
//SEARCH BUTTON
```

```
try {
      Class.forName("java.sql.Driver");
      java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String bkn = jTextField2.getText();
      String query = "select * from hotel where booking_no=" + bkn + ";";
      ResultSet rs = stmt.executeQuery(query);
      int a, d, f, g, h;
      String b, c, e;
      if (rs.next())
        b = rs.getString("name");
        if (b.equals("<name>"))
        {
          JOptionPane.showMessageDialog(null, "No such record found");
        } else
          a = rs.getInt("booking_no");
          b = rs.getString("name");
          c = rs.getString("phno");
          d = rs.getInt("roomno");
          e = rs.getString("roomtype");
          f = rs.getInt("NODays");
          g = rs.getInt("PDC");
          h = rs.getInt("TA");
          ¡TextField1.setText(b);
          ¡TextField3.setText(""+c);
          ¡TextField4.setText(""+d);
          jTextField5.setText("" + e);
          ¡TextField6.setText(""+f);
          jTextField7.setText("" + g);
          jTextField8.setText(""+h);
```

```
JOptionPane.showMessageDialog(null, "Searched Successfully");
          ¡Button3.setEnabled(true);
        }
      } else
        JOptionPane.showMessageDialog(null, "No such record found");
      }
      JOptionPane.showMessageDialog(null, query);
      stmt.close();
      con.close();
    } catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
    // TODO add your handling code here:
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
//DELETE BUTTON
    try {
      Class.forName("java.sql.Driver");
      iava.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      int a = Integer.parseInt(jTextField2.getText());//booking no
      int d = Integer.parseInt(jTextField4.getText());//room no
      String query = "update hotel set booking_no=" + d +
",name='<name>',phno=null,NODays=null,PDC=null,TA=null where booking_no=" + a + "
      JOptionPane.showMessageDialog(null, query);
```

```
Statement stmt = (Statement) con.createStatement();
      stmt.executeUpdate(query);
      JOptionPane.showMessageDialog(null, "Deleted Successfully");
      stmt.close();
      con.close();
    } catch (Exception e) {
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
// TODO add your handling code here:
  }
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
//BACK BUTTON
    this.setVisible(false);
    Hotel_Mannagement d = new Hotel_Mannagement();
    d.setVisible(true);
    // TODO add your handling code here:
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
//EXIT BUTTON
System.exit(0);
    // TODO add your handling code here:
        }
```

#### 4.6. Room Availability

This will show the status of all rooms

- ✓ Rooms Available
- ✓ Rooms Occupied

#### 4.6.1. Screen Shot



#### 4.6.2. Code

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) { //ROOM AVAILAIBLE BUTTON

DefaultTableModelmodel=(DefaultTableModel)jTable1.getModel(); try {

Class.forName("java.sql.Driver");

java.sql.Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/your\_database\_name", "root", "mysql password");

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

String query = "select roomtype,roomno from hotel where name='<name>' order by roomno;";

ResultSet rs =stmt.executeQuery(query);

```
while (rs.next())
        String roomtype = rs.getString("roomtype");
        int roomno = rs.getInt("roomno");
        model.addRow(new Object[]{roomtype, roomno});
     }
     int a = model.getRowCount();
      JOptionPane.showMessageDialog(null, "There are " + a + " rooms availaible ");
   catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
     JOptionPane.showMessageDialog(this, e.getMessage());
   DefaultTableModelmodel1=(DefaultTableModel);Table2.getModel();
   try {
      Class.forName("java.sql.Driver");
     java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your_database_name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select roomtype,roomno from hotel where not name='<name>'
order by roomno;";
      ResultSet rs =stmt.executeQuery(query);
      while (rs.next())
        String roomtype = rs.getString("roomtype");
        int roomno = rs.getInt("roomno");
        model1.addRow(new Object[]{roomtype, roomno});
```

```
}
      int a = model1.getRowCount();
      JOptionPane.showMessageDialog(null, "There are " + a + " rooms occupied");
    }
    catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
   // TODO add your handling code here:
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
//BACK BUTTON
    this.setVisible(false);
    Hotel_Mannagement d = new Hotel_Mannagement();
    d.setVisible(true);
// TODO add your handling code here:
  }
```

#### 4.7. Customer Details

#### 4.7.1. Screen Shot

Name	Booking no	Room no	Date of Entry	Time of Entry	No of Days
Manav	11		2017-12-03	20:23:20	2
Mudit	12	1	2017-12-03	19:59:54	2
Vidit	13	5	2017-12-03	20:02:02	1
Harsh	15	5	2017-12-03	20:22:19	1

#### 4.7.2. Code

```
try {
      Class.forName("java.sql.Driver");
      java.sql.Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/your database name",
"root", "mysql password");
      Statement stmt = (Statement) con.createStatement();
      String query = "select * from customer order by date of entry";
      ResultSet rs = stmt.executeQuery(query);
      while (rs.next())
        String name = rs.getString("name");
        int Book = rs.getInt("book_no");
        int roomno = rs.getInt("room_no");
        String date = rs.getString("dateofentry");
        String time = rs.getString("time");
        int NOD = rs.getInt("NOD");
        model1.addRow(new Object[]{name, Book, roomno, date, time, NOD});
      }
    catch (Exception e)
      JOptionPane.showMessageDialog(null, "error");
      JOptionPane.showMessageDialog(this, e.getMessage());
    }
    // TODO add your handling code here:
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
//BACK BUTTON
    this.setVisible(false);
    Hotel_Mannagement d = new Hotel_Mannagement();
```

```
d.setVisible(true);
// TODO add your handling code here:
}
```