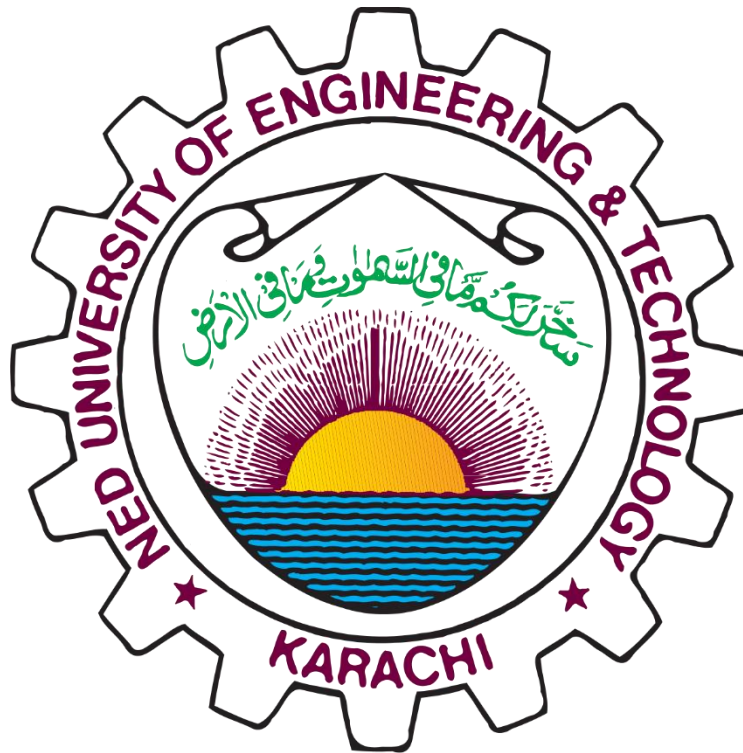


NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY



PROJECT NAME:

HOSTEL MANAGEMENT SYSTEM

PROJECT MEMBERS:

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DEPARTMENT:

COMPUTER SYSTEMS ENGINEERING (2 YEAR)

PROJECT OVERVIEW

The hostel management system is software to provide college students accommodation to the university hostel more efficiently. This project also keeps details of the employees and applied students and the rooms. This project is intended to minimize human works and make hostel allocation an easier job for students and hostel authorities by providing an application for hostel, automatically help the students to select the room from hostel if it is not already booked. Students will get approval notification in their mails. Students can hostel fees if the admin show the details to the students. This application not only deals with the students information and the room information whether any student booked the room or not but also have the information of all the employees working in the hostel. Through this great application, the hostel management can see which student is living in which room and which student has left the hostel and there is also a separate table which deals with the current status of employee and also our application contains the previous record of employees who has left the hostel.

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HOSTEL MANAGEMENT SYSTEM:

- ENTITIES:

1. Student
2. Employee
3. Room

Instead of Visitor, we use employee entity and we don't include meal and notice board entity. In future, the app can be implemented by adding this two entities to make this application more beneficial.

- APPLICATIONS USED FOR THE DEVELOPMENT OF THIS PROJECT:

1. FRONT END: NETBEANS IDE(JAVASCRIPT)
2. BACKEND: MYSQL,NETBEANS

OPTIONS IN HOSTEL MANAGEMENT SYSTEM:

LOGIN PAGE:

There are two fields one is for username and other one is for password and we set the username as hostel and password as admin. If the user write wrong password, a pop message of incorrect password is being shown. If the user writes right password, the user moves into the home page.

HOME PAGE:

Consists of different methods like manage rooms, new student, update and delete students etc which we implemented in our project.

MANAGE ROOMS:

In manage rooms we deal with the rooms which are being booked or not. The admin of hostel can update or delete the rooms by giving a specific room number which is the room id. There is a table below the update or add rooms which shows which rooms are being booked and which are left. There is an active status which shows that if the room is ready for booking, it shows 'Yes' otherwise 'No' is being shown.

NEW STUDENT:

This is used to book a vacant room for a student by filling information like mobile number of student, name, father name, mother name, email, permanent address, college name, card number, room number. If all rooms are being booked, there is an application of student to have a room in hostel so a pop message is shown indicating that "ALL ROOMS ARE BOOKED".

UPDATE AND DELETE STUDENTS:

It is basically used to update the information of any student by using update button and to delete a particular record of student from hostel we can use delete button and to clear any information, admin can use clear button. There is a living status which shows whether the student is living or leaved the hostel. By just writing mobile number and clicking on search option, the admin gets whole details of that student and according to the requirement, admin performs the required function.

STUDENT FEES:

The student fees shows the amount which the student has to pay in order to live in the hostel. It consists of mobile number, name, email, room number, month ,amount which is being paid. There is a table below the required information which deals with which student paid fees at which particular month. And we don't allow re payment amount for the same month if user does so a message is being displayed "The fees is already being paid".

ALL STUDENT LIVING:

This table shows the detail of students living in the hostel at current time.

LEAVED STUDENT:

This table shows the detail of students who left the hostel.

NEW EMPLOYEE:

This is used to register the new employee in the hostel.

UPDATE AND DELETE EMPLOYEE:

It is basically used to update the information of any employee by using update button and to delete a particular record of employee from hostel we can use delete button and to clear any information, admin can use clear button. There is a working status which shows whether the employee is working or not working in the hostel. By just writing mobile number and clicking on search option, the admin gets whole details of that employee and according to the requirement, admin performs the required function.

Employee Payment:

In employee payment, we save the details of employee that particular employee get salary. It consists of mobile number, name, email, designation , month , payment amount .This information must have to fill in order to check whether employee gets salary or not. In employee payment, there is a table which shows which employees have gotten their salaries and if a employee have not get any salary, there is nothing in the table of that particular employee.

All Employee Working:

This table shows the detail of employee working in the hostel at current moment.

Leaved Employee:

This table shows the detail of employee who left the work from the hostel .

OUTPUTS:

SQL TABLES:

MySQL 8.0 Command Line Client

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use hostel;

Database changed

mysql> desc student;

Field	Type	Null	Key	Default	Extra
mobileNo	varchar(10)	NO	PRI	NULL	
name	varchar(200)	YES		NULL	
father	varchar(200)	YES		NULL	
mother	varchar(200)	YES		NULL	
email	varchar(200)	YES		NULL	
address	varchar(200)	YES		NULL	
college	varchar(100)	YES		NULL	
uniqueID	varchar(12)	YES		NULL	
roomNo	varchar(10)	YES		NULL	
status	varchar(20)	YES		NULL	

10 rows in set (0.07 sec)

mysql> desc employee;

Field	Type	Null	Key	Default	Extra
mobileNo	varchar(10)	NO	PRI	NULL	
name	varchar(200)	YES		NULL	
father	varchar(200)	YES		NULL	
mother	varchar(200)	YES		NULL	
email	varchar(200)	YES		NULL	
address	varchar(200)	YES		NULL	
uniqueID	varchar(20)	YES		NULL	
designation	varchar(100)	YES		NULL	
status	varchar(50)	YES		NULL	

9 rows in set (0.00 sec)

mysql> desc fees;

Field	Type	Null	Key	Default	Extra
mobileNo	varchar(10)	YES		NULL	
month	varchar(50)	YES		NULL	
amount	varchar(50)	YES		NULL	

3 rows in set (0.00 sec)

mysql> desc payment;

Field	Type	Null	Key	Default	Extra
mobileNo	varchar(10)	YES		NULL	
month	varchar(50)	YES		NULL	
amount	varchar(50)	YES		NULL	

3 rows in set (0.00 sec)


```

MySQL 8.0 Command Line Client
3 rows in set (0.00 sec)

mysql> desc payment;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| mobileNo | varchar(10) | YES | | NULL | |
| month | varchar(50) | YES | | NULL | |
| amount | varchar(50) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select *from student;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| mobileNo | name | father | mother | email | address | college | uniqueID | roomNo | status |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 033322267 | kurat | Bilal | Sumaiya | kurat67@gmail.com | karachi | SirSyed | 4433 | 004 | living |
| 033332222 | Sana | Hamza | Shama | sana45@gmail.com | Gulshan | FORMOMEN | 567 | 002 | living |
| 1234567890 | Ayesha | Md.Farooq | shama | ayesha2@gmail.com | gulshan-e-bahar | sirsyed | 444422224444 | 003 | leaved |
| 45678 | Mahnoor | Ashfaq | Shazia | mahnoor45@gmail.com | Liaquat Chock | SunShine | 678 | 003 | living |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.07 sec)

mysql> select*from employee;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| mobileNo | name | father | mother | email | address | uniqueID | designation | status |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 0315897058 | Asma | Shaheer | Hafsa | asma23@gmail.com | karachi | 4455 | HouseKeeping | Working |
| 123 | Aliya | Ibrahim | Sukaina | aliya67@gmail.com | hyderabad | 568 | Accounting and Budgeting | Not Working |
| 5577 | Hafsa | Saleem | Kanwal | hafsa87@gmail.com | Sindh | 2222 | Purchasing and Invenry Control | Working |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> Select *from fees;
+-----+-----+-----+
| mobileNo | month | amount |
+-----+-----+-----+
| 1234567890 | Sep-2021 | 6000 |
| 033332222 | Sep-2021 | 6000 |
| 033322267 | Sep-2021 | 6000 |
+-----+-----+-----+
3 rows in set (0.02 sec)

mysql> Select *from payment;
+-----+-----+-----+
| mobileNo | month | amount |
+-----+-----+-----+
| 0315897058 | Sep-2021 | 10000 |
| 123 | Sep-2021 | 10000 |
| 5577 | Sep-2021 | 10000 |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> _

```

MANAGE ROOM:

ADD NEW NUMBER

Room Number
Activate or Deactivate ☐ yes

save

UPDATE AND DELETE ROOM

Room Number

Search

Activate or Deactivate ☐ yes

Update

Delete

ALL ROOMS

Number	Activate	Room Status
001	Yes	Booked
002	Yes	Booked
003	Yes	Not Booked
004	Yes	Booked
005	Yes	Not Booked
006	No	Not Booked

NEW STUDENT:

Mobile Number

NAME

Father Name

Mother Name

Email

Permanent Address

College Name

Unique ID

Room Number

Save

Clear

UPDATE AND DELETE STUDENT

Mobile Number

Search

Name

Father Name

Mother name

Email

Update

Permanent Address

Delete

College Name

Clear

Unique ID

Room Number

Living Status

STUDENTFEES

Mobile Number

Search

Name

Email

Room Number

Month

Amount to be payed

Save

Clear

Month	Amount
-------	--------

STUDENT LIVING

Mobile Number: 5577

Name: Hafsa

Father NAME: Saleem

Mother name: Kanwal

Email: hafsa87@gmail.com

Permanent Address: Sindh

Unique ID: 2222

Designation: Purchasing and Inventory Control

Buttons: Save, Clear

STUDENT LEAVED

Name	Mobile Nu...	Father Na...	Mother Na...	Email	Address	College N...	Unique ID	Room Nu...
Ayesha	12345678...	Md.Farooq	shama	ayesha2...	gulshan-e...	sirsyed	44442222...	003

UPDATE AND DELETE EMPLOYEE

Mobile Number: 5577

Name: Hafsa

Father Name: Saleem

Mother Name: Kanwal

Email: hafsa87@gmail.com

Permanent Address: Sindh

Unique ID: 2222

Designation: Purchasing and Inventory Control

Working Status: Working

Buttons: Update, Delete, Clear

NEW EMPLOYEE

Mobile Number: 5577

Name: Hafsa

Father NAME: Saleem

Mother name: Kanwal

Email: hafsa87@gmail.com

Permanent Address: Sindh

Unique ID: 2222

Designation: Purchasing and Inventory Control

Buttons: Save, Clear

EMPLOYEE WORKING

Name	Mobile no.	Father Name	Mother NAME	Email	Address	Unique ID	Designation
Asma	0315997058	Shaheer	Hafsa	asma23@g...	karachi	4455	HouseKee...
Hafsa	5577	Saleem	Kanwal	hafsa87@g...	Sindh	2222	Purchasing...

EMPLOYEE PAYMENT

Mobile Number: 5577

Name: Hafsa

Email: hafsa87@gmail.com

Designation: Purchasing and Inventory Control

Month: Sep-2021

Payment Amount: 10000

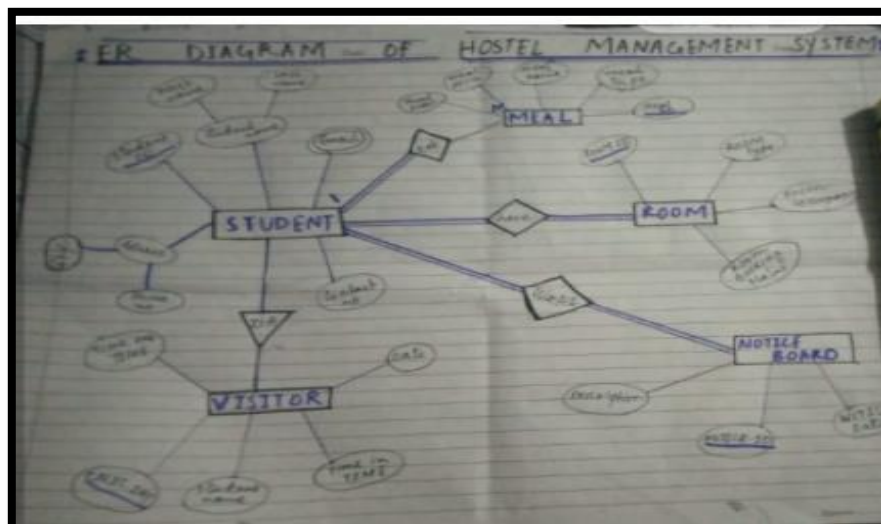
Month: Sep-2021

Message: Successfully Updated

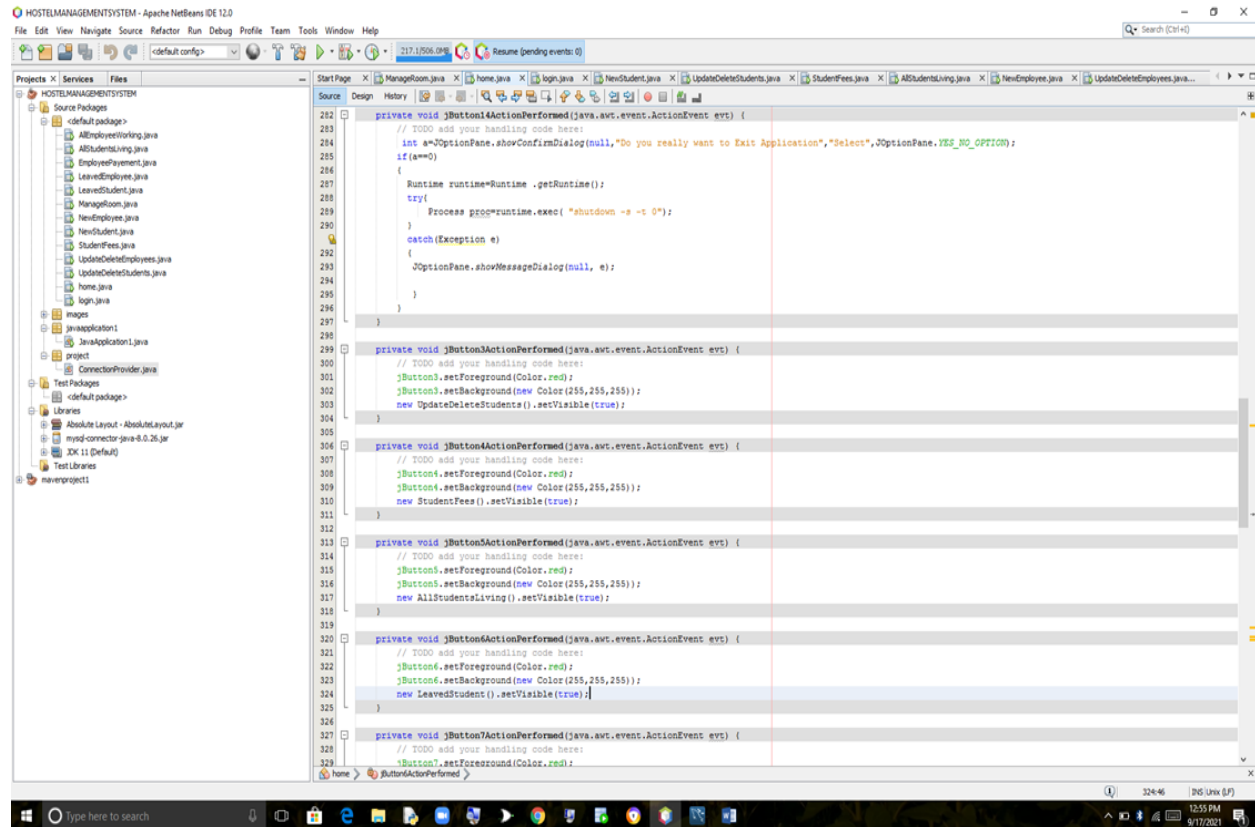
EMPLOYEE LEAVED:

Name	Mobile Nu...	Father Name	Mother name	Email	Address	Unique ID	Designation
Aliya	123	Ibrahim	Sukaina	aliya67@g...	hyderabad	568	Accounting ...

ER DIAGRAM:



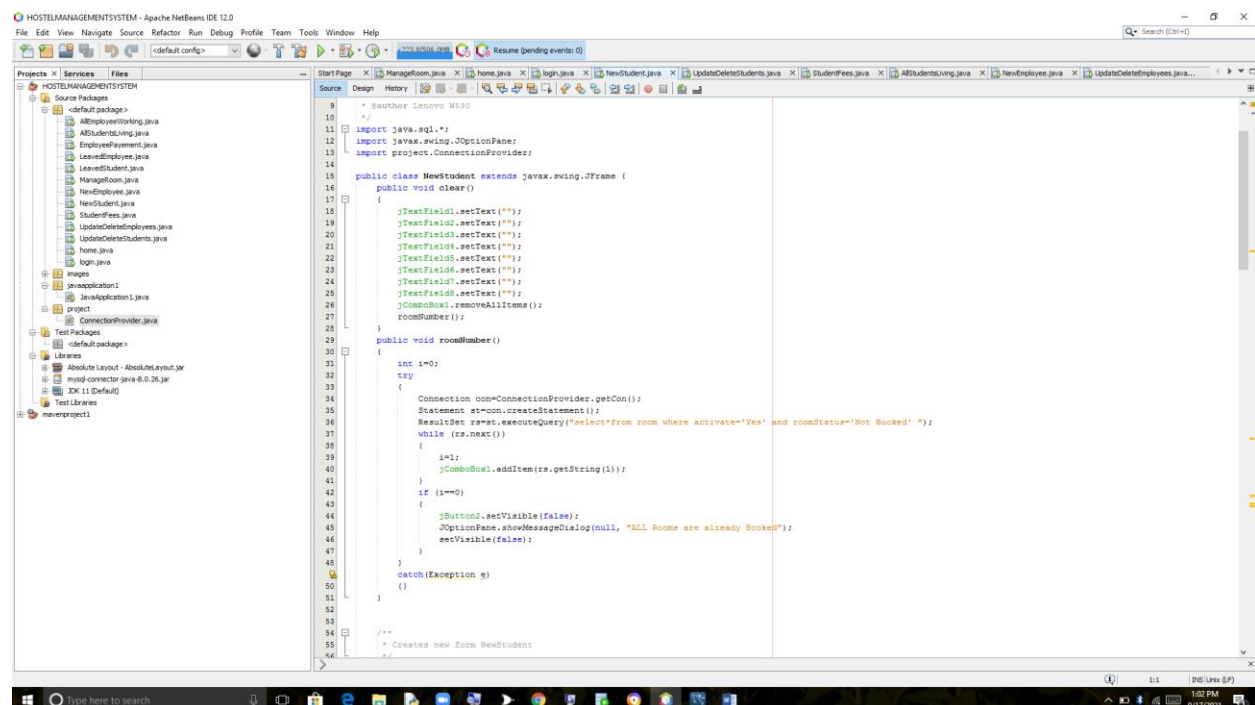
HOME PAGE CODES



The screenshot shows the Apache NetBeans IDE with the project 'HOSTELMANAGEMENTSYSTEM'. The 'ManageRoom.java' file is open, displaying the following code:

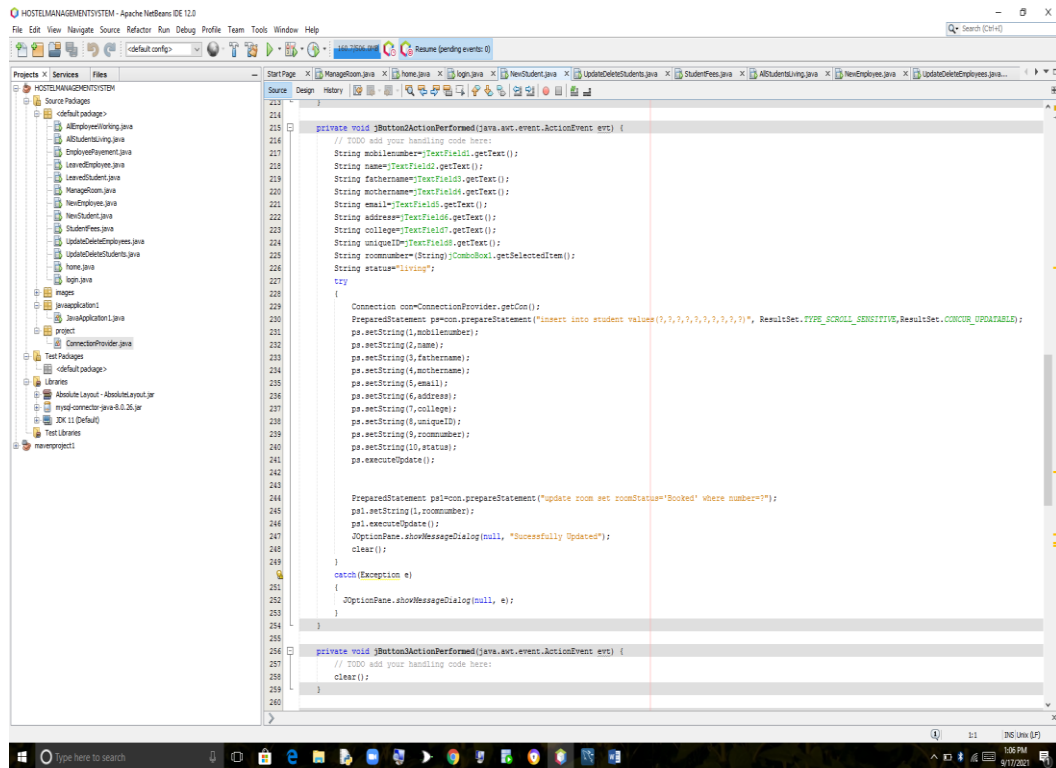
```
282 private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
283     // TODO add your handling code here:
284     int a=JOptionPane.showConfirmDialog(null,"Do you really want to Exit Application","Select",JOptionPane.YES_NO_OPTION);
285     if(a==0)
286     {
287         Runtime runtime=Runtime.getRuntime();
288         try{
289             Process procp=runtime.exec( "shutdown -s -t 0");
290         }
291         catch (Exception e)
292         {
293             JOptionPane.showMessageDialog(null, e);
294         }
295     }
296 }
297
298 private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
299     // TODO add your handling code here:
300     jButton3.setForeground(Color.red);
301     jButton3.setBackground(new Color(255,255,255));
302     new UpdateDeleteStudents().setVisible(true);
303 }
304
305 private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
306     // TODO add your handling code here:
307     jButton4.setForeground(Color.red);
308     jButton4.setBackground(new Color(255,255,255));
309     new StudentFees().setVisible(true);
310 }
311
312 private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
313     // TODO add your handling code here:
314     jButton5.setForeground(Color.red);
315     jButton5.setBackground(new Color(255,255,255));
316     new AllStudentsLiving().setVisible(true);
317 }
318
319 private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {
320     // TODO add your handling code here:
321     jButton6.setForeground(Color.red);
322     jButton6.setBackground(new Color(255,255,255));
323     new LeavedStudent().setVisible(true);
324 }
325
326 private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {
327     // TODO add your handling code here:
328     jButton7.setForeground(Color.red);
329 }
```

NEW STUDENT CODES

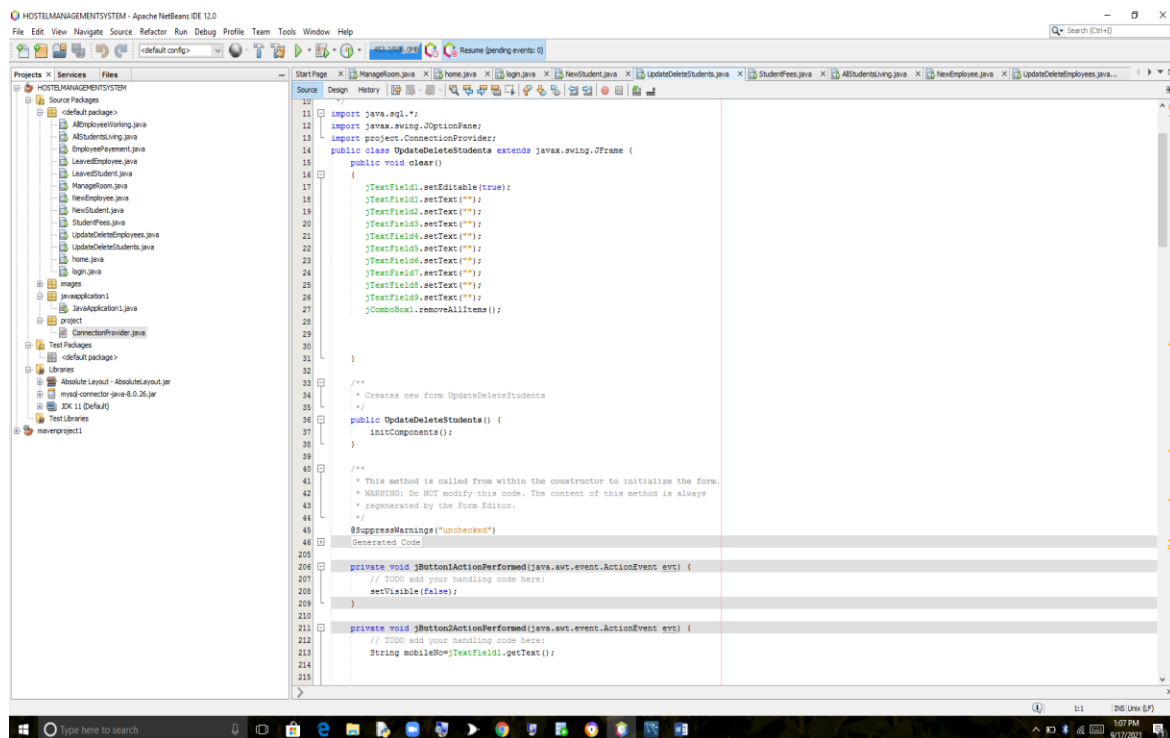


The screenshot shows the Apache NetBeans IDE with the project 'HOSTELMANAGEMENTSYSTEM'. The 'NewStudent.java' file is open, displaying the following code:

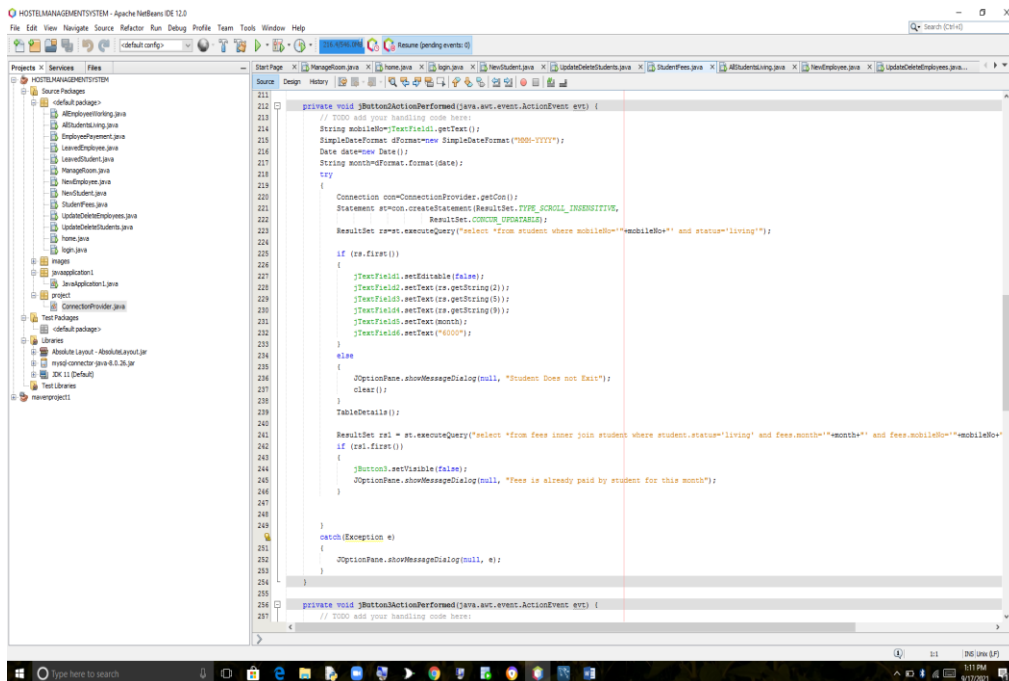
```
9  * Author: Lenovo W390
10  */
11  import java.sql.*;
12  import javax.swing.JOptionPane;
13  import project.ConnectionProvider;
14
15  public class NewStudent extends javax.swing.JFrame {
16
17      public void clear()
18      {
19          jTextField1.setText("");
20          jTextField2.setText("");
21          jTextField3.setText("");
22          jTextField4.setText("");
23          jTextField5.setText("");
24          jTextField6.setText("");
25          jTextField7.setText("");
26          jTextField8.setText("");
27          JComboBox1.removeAllItems();
28          roomNumber();
29      }
30
31      public void roomNumber()
32      {
33          int i=0;
34          try
35          {
36              Connection con=ConnectionProvider.getConnection();
37              Statement st=con.createStatement();
38              ResultSet rs=st.executeQuery("select *from room where activate='Yes' and roomStatus='Not Booked' ");
39              while (rs.next())
40              {
41                  i=i+1;
42                  JComboBox1.addItem(rs.getString(1));
43              }
44              if (i==0)
45              {
46                  jButton2.setVisible(false);
47                  JOptionPane.showMessageDialog(null, "ALL Rooms are already Booked");
48                  setVisible(false);
49              }
50          }
51          catch (Exception e)
52          {
53              ()
54          }
55      }
56
57      /**
58       * Create new form NewStudent
59       */
60 }
```



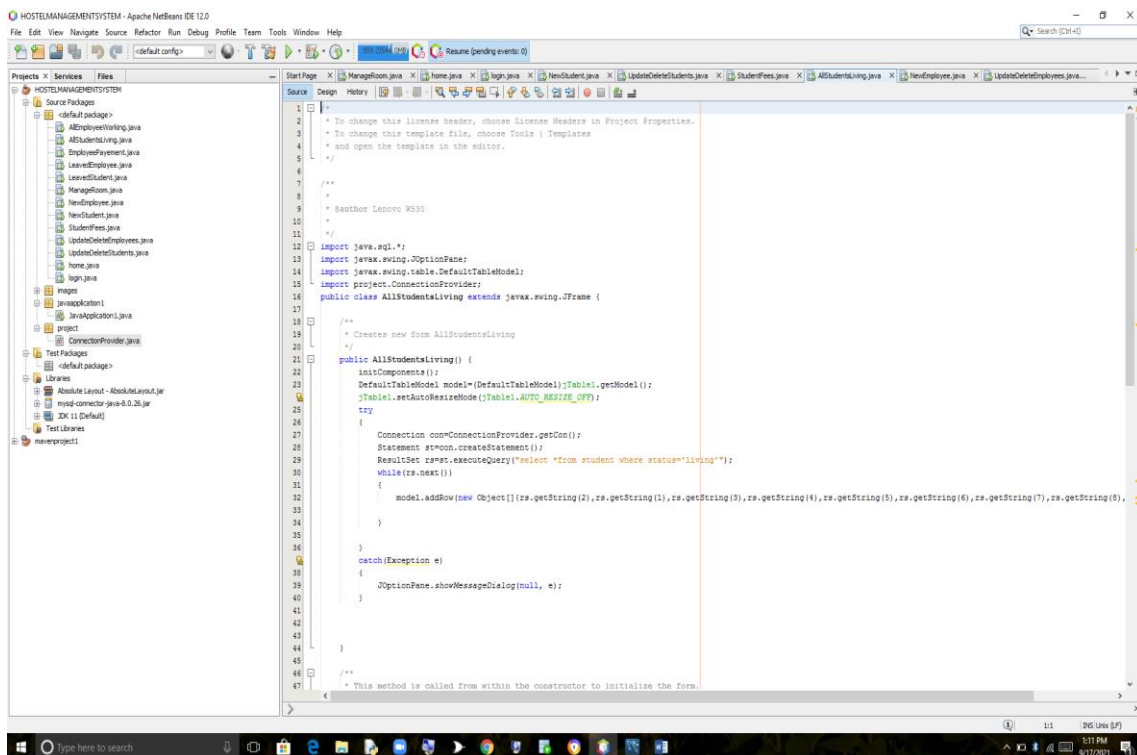
UPDATE AND DELETE STUDENTS



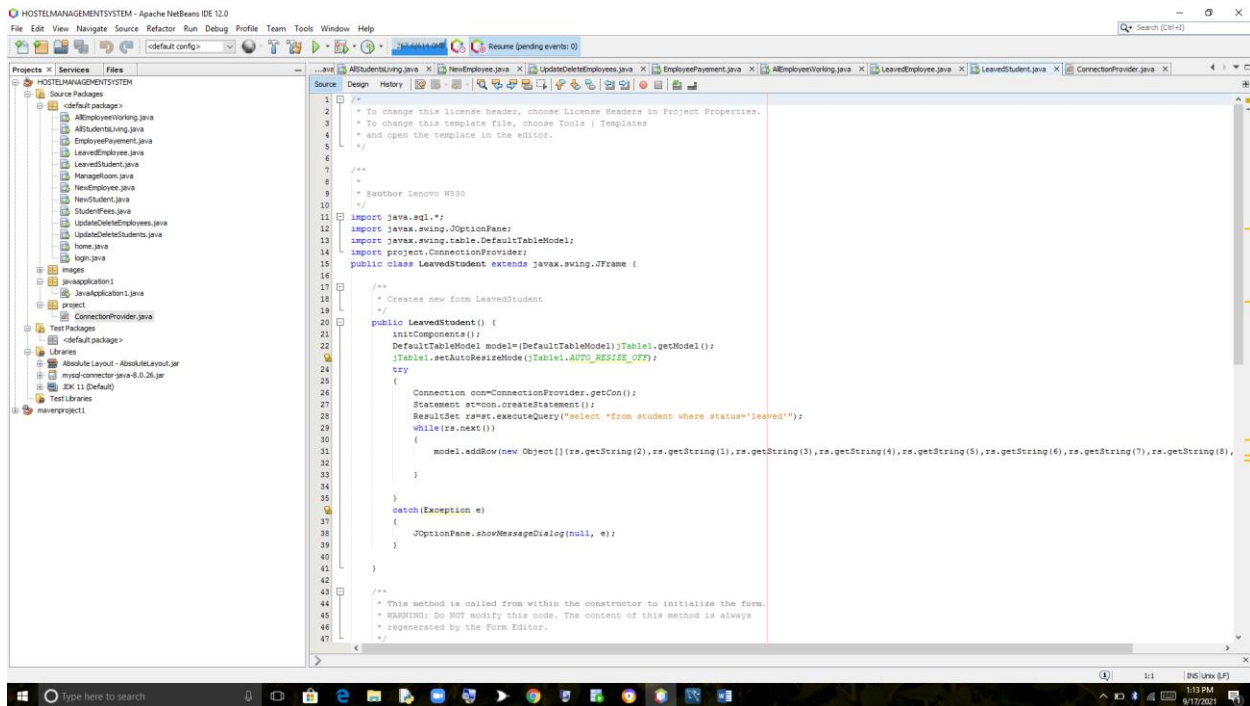
STUDENT FEES



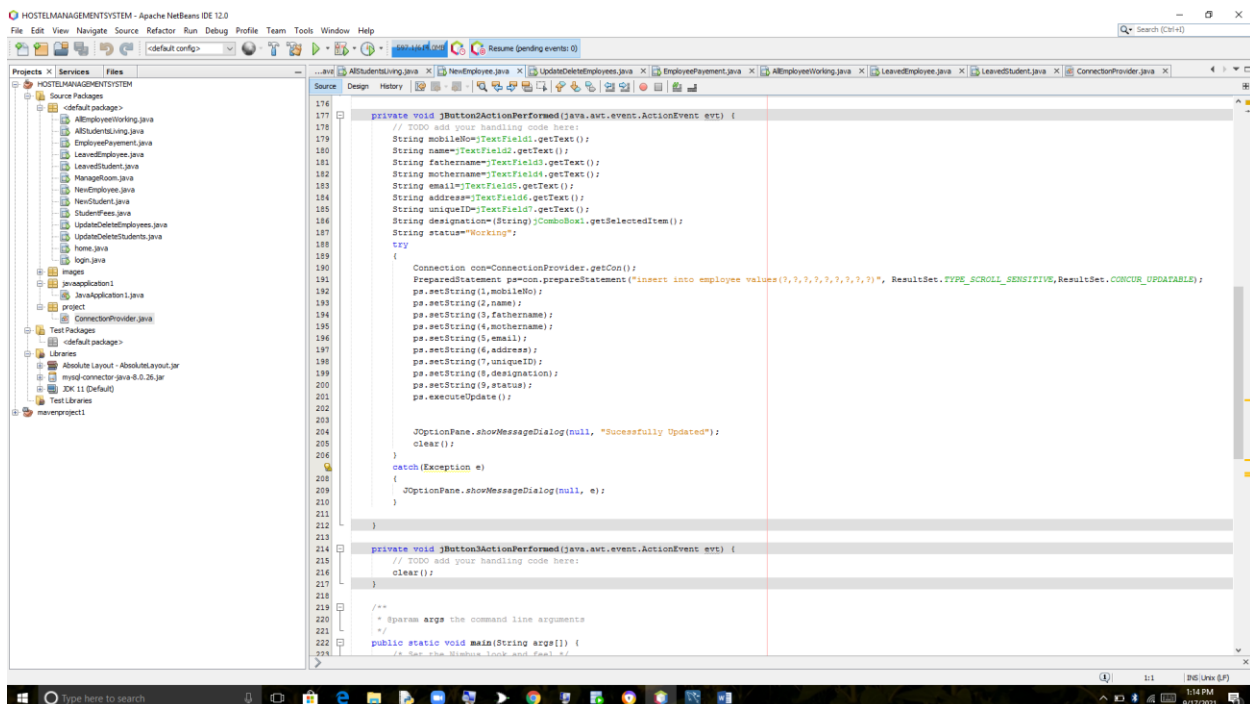
ALL STUDENT LIVING

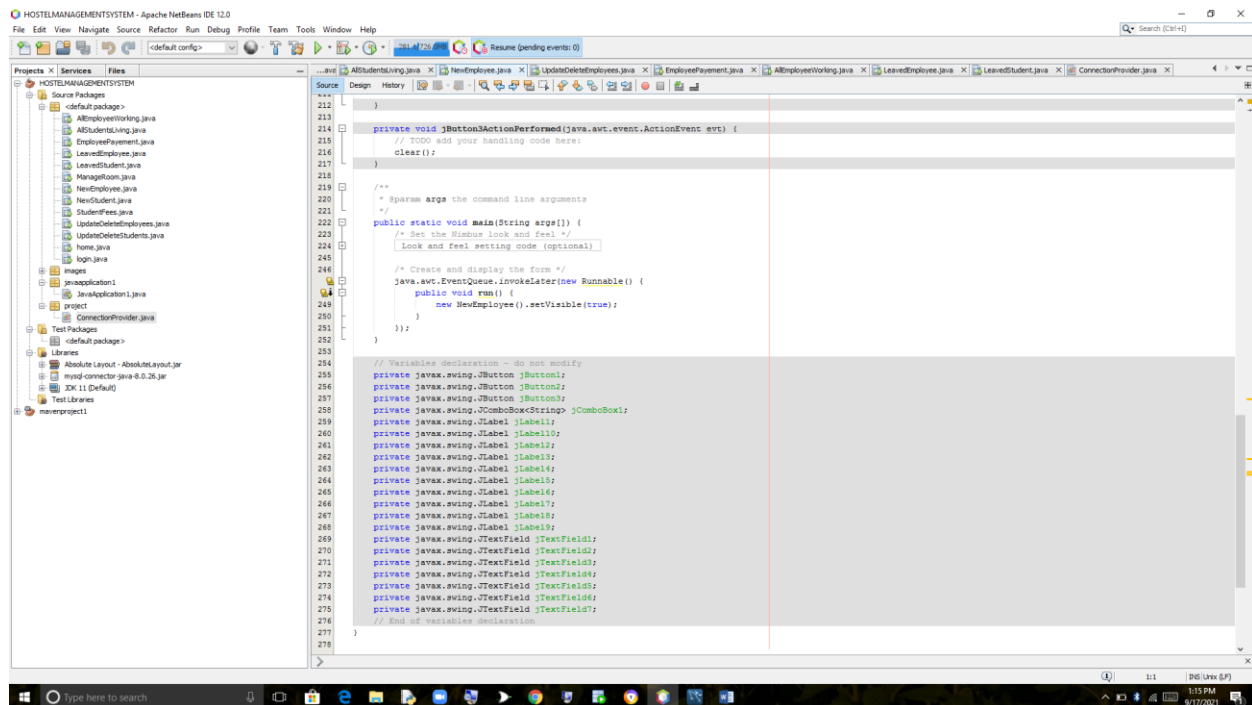


STUDENT LEAVED

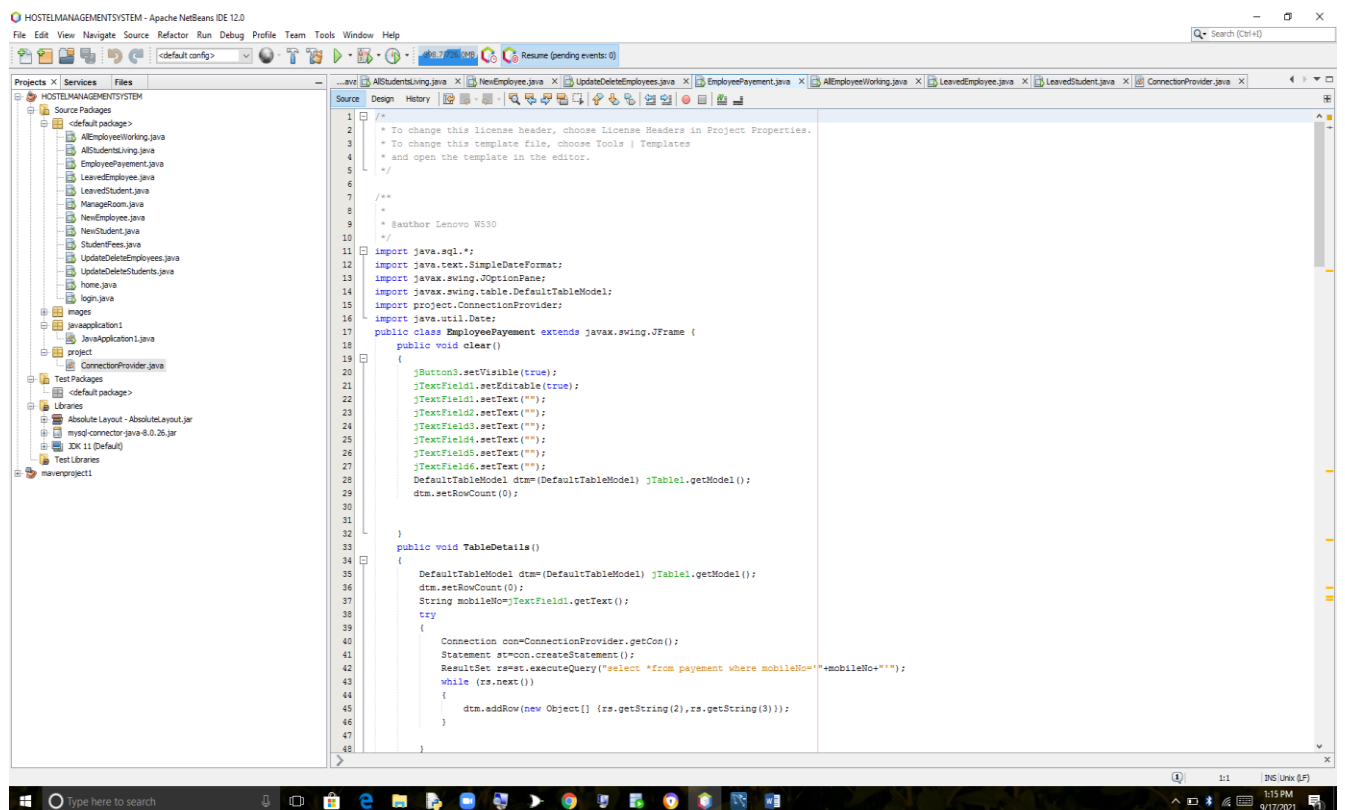


NEW EMPLOYEE





EMPLOYEE PAYMENT



UPDATE AND DELETE EMPLOYEE

