JAVA SWINGS BASED- STUDENT ASSIGNMENTS TRACKER

- SQL CONNECTIVITY USING JDBC

Α

Report

Submitted in partial fulfillment of the Requirements for the award of the Degree

of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

M Amruth Sai <1602-19-737-066> Under the guidance of Ms B. Leelavathy



Department of Information Technology
Vasavi College of Engineering
(Autonomous) (Affiliated to Osmania
University) Ibrahimbagh, Hyderabad-31

BONAFIDE CERTIFICATE

This is to certify that this project report titled 'STUDENT ASSIGNMENTS TRACKER' is a project work of Mr. M Amruth Sai bearing roll no. 1602-19-737-066 who carried out the project under my supervision in the IV semester for the academic year 2020- 2021.

Signature

Internal Examiner Examiner

ABSTRACT:

Signature

External

The main aim of Courier Management System is to deliver the parcel. We aim to demonstrate the use of create, read, update and delete SQL operations through this project. The project starts by adding details of courier branch and staffs working in their respective branches. The staff then adds sender and receiver details of that parcel i.e, Booking details. Then, the parcel is scheduled for delivery. Now, when the parcel is received by the receiver branch, they deliver the parcel and delivery status is shown

REQUIREMENT ANALYSIS:

List of Tables:

- Branch
- Delivery
- Staff
- Booking
- Schedule

List of attributes with their domain types:

Branch

- Id INT(10)
- branchCode VARCHAR2(15)
- branchName VARCHAR2(25)
- branchAddress VARCHAR2(100)

Delivery

- Did INT(10)
- Bid INT(10)
- Selection VARCHAR2(50)

Staff

- Sid INT(5)
- Staff_name VARCHAR2(50)
- Staff_Contact VARCHAR2(20)

Booking

- Bid varchar2(30)
- ToName VARCHAR2(25)
- ToAddress VARCHAR2(100)
- Id Number(5)
- Weight INT(5)

Studer	t Assignments
Studel	
Schedul	
Schedul	
•	ShId INT(11) Bid INT(5)
•	Sid INT(5)
•	Id INT(5)
·	
1602-1	9-737-066
M Amr	uth Sai

AIM AND PRIORITY OF THE PROJECT

To create a Java GUI based student assignments tracker which takes the values like: user id, password for login and stores details of all students, faculty and student assignments their marks in those and staff can assign assignments to students. These values are to be updated in the database using JDBC connectivity.

ARCHITECTURE AND TECHNOLOGY

Software used: Java Eclipse, Oracle 11g Database, Java SE version 13, SQL*Plus.

Java SWINGS:

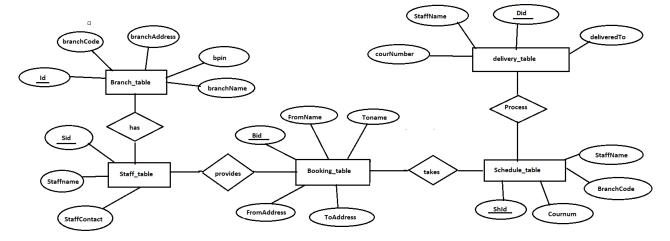
Java SWINGS is an API to develop GUI or window-based applications in java. Java SWING components are platform-independent. It is lightweight. The javax.swing package provides classes for SWING API such as JTextField, JLabel, JTextArea, JRadioButton, JCheckBox, JChoice, JList etc.

SQL:

Structure Query Language(SQL) is a database query language used for storing and managing data in Relational DBMS. SQL was the first commercial language introduced for E.F Codd's **Relational** model of database. Today almost all RDBMS (MySql, Oracle, Infomix, Sybase, MS Access) use **SQL** as the standard database query language. SQL is used to perform all types of data operations in RDBMS.

DESIGN:

ER DIAGRAM:



DDL COMMANDS:

```
SQL> desc Branch_table;
                                            Null?
Name
                                                     Type
                                            NOT NULL NUMBER(38)
ID
BRANCHCODE
                                                     VARCHAR2(15)
BRANCHNAME
                                                     VARCHAR2(25)
BRANCHADDRESS
                                                     VARCHAR2(100)
BPIN
                                                     VARCHAR2(10)
SQL> desc Booking_table;
                                            Null?
Name
                                                     Type
BID
                                            NOT NULL VARCHAR2(10)
                                            NOT NULL VARCHAR2(25)
FROMNAME
                                            NOT NULL VARCHAR2(25)
TONAME
                                            NOT NULL VARCHAR2(100)
FROMADDRESS
TOADDRESS
                                            NOT NULL VARCHAR2(100)
SQL> desc Delivery_table;
                                            Null?
Name
                                                     Type
                                            NOT NULL NUMBER(38)
DID
COURNUMBER
                                                     VARCHAR2(15)
STAFFNAME
                                                     VARCHAR2(50)
DELIVEREDTO
                                                     VARCHAR2(50)
```

```
SQL> create table Branch_table(
 2 Id INT,
 3 branchCode varchar2(15),
 4 branchName varchar2(25),
 5 branchAddress varchar2(100),
 6 bpin varchar2(10),
 7 PRIMARY KEY(Id));
SQL> create table Delivery_table(
 2 Did INT,
 3 courNumber varchar2(15),
 4 StaffName varchar2(50),
 5 deliveredTo varchar2(50),
 6 PRIMARY KEY(Did));
Table created.
SQL> create table Staff_table(
 2 Sid INT,
 3 Staffname varchar2(50),
 4 StaffContact varchar2(10),
 5 PRIMARY KEY(Sid));
Table created.
SQL> create table Schedule_table(
 2 ShId INT,
   Cournum varchar2(15),
 4 BranchCode varchar2(15),
 5 StaffName varchar2(15),
 6 PRIMARY KEY(ShId));
Table created.
SQL> desc Branch_table;
                                              Null?
Name
                                                        Type
ID
                                              NOT NULL NUMBER(38)
BRANCHCODE
                                                        VARCHAR2(15)
BRANCHNAME
                                                        VARCHAR2(25)
                                                        VARCHAR2(100)
BRANCHADDRESS
BPIN
                                                        VARCHAR2(10)
SQL> desc Schedule_table;
                                              Null?
Name
                                                        Type
SHID
                                              NOT NULL NUMBER(38)
COURNUM
                                                        VARCHAR2(15)
BRANCHCODE
                                                        VARCHAR2(15)
STAFFNAME
                                                        VARCHAR2(15)
SQL> desc Staff_table;
                                              Null?
Name
                                                        Type
SID
                                              NOT NULL NUMBER(38)
STAFFNAME
                                                        VARCHAR2(50)
STAFFCONTACT
                                                        VARCHAR2(10)
```

```
SQL> create table Booking_table(
2  Bid varchar2(10),
3  FromName varchar2(25) NOT NULL,
4  ToName varchar2(25) NOT NULL,
5  FromAddress varchar2(100) NOT NULL,
6  ToAddress varchar2(100) NOT NULL,
7  PRIMARY KEY(Bid));
Table created.
```

DML COMMANDS:

```
SQL> select * from branch;
         ID BRANCH NAME
                                                  BRANCH CODE
BRANCH_ADDRESS
          1 branch1
                                                  BR100
abc xyz
                                                  BR101
          2 branch2
abc abc
SQL> insert into branch values(&Id,'&Branch_name','&Branch_code','&Branch_address');
Enter value for id: 3
Enter value for branch_name: branch3
Enter value for branch_code: BR!02
Enter value for branch_address: ghl xyz
old 1: insert into branch values(&Id,'&Branch_name','&Branch_code','&Branch_address')
new 1: insert into branch values(3,'branch3','BR!02','ghl xyz')
1 row created.
SQL> /
Enter value for id: 4
Enter value for branch_name: branch4
Enter value for branch_code: BR103
Enter value for branch_address: jkl xyz
     1: insert into branch values(&Id,'&Branch_name','&Branch_code','&Branch_address')
1: insert into branch values(4,'branch4','BR103','jkl xyz')
1 row created.
SQL> /
Enter value for id: 5
Enter value for branch_name: branch5
Enter value for branch_code: BR104
Enter value for branch_address: mno xyz
      1: insert into branch values(&Id,'&Branch_name','&Branch_code','&Branch_address')
1: insert into branch values(5,'branch5','BR104','mno xyz')
1 row created.
```

```
SQL> select * from staff;
      SID STAFF_NAME
                               STAFF_CONTACT
       21 Sachin
                               9999999991
       22 jack
                              9999999992
       23 john
                               9999999998
SQL> desc staff;
                                          Null?
Name
                                                   Type
SID
                                          NOT NULL NUMBER
STAFF_NAME
                                          NOT NULL VARCHAR2(20)
STAFF_CONTACT
                                          NOT NULL VARCHAR2(20)
SQL> insert into staff values(&SID,'&Staff name','&Staff contact');
Enter value for sid: 24
Enter value for staff name: warner
Enter value for staff_contact: 9999999993
old 1: insert into staff values(&SID,'&Staff_name','&Staff_contact')
new 1: insert into staff values(24,'warner','9999999993')
1 row created.
SQL> /
Enter value for sid: 25
Enter value for staff name: smith
Enter value for staff_contact: 9999999994
old 1: insert into staff values(&SID,'&Staff_name','&Staff_contact')
new 1: insert into staff values(25,'smith','9999999994')
1 row created.
SQL> commit;
Commit complete.
SQL>
```

```
SQL> desc booking;
                                           Null?
BID
                                           NOT NULL NUMBER
TONAME
                                                    VARCHAR2(15)
TOADDRESS
                                                    VARCHAR2(20)
WEIGHT
                                                    NUMBER
ID
                                           NOT NULL NUMBER
SQL> insert into booking values(&BID,'&toname','&toaddress',&weight,&Id);
Enter value for bid: 33
Enter value for toname: yuvi
Enter value for toaddress: xyz jkl
Enter value for weight: 20
Enter value for id: 3
old 1: insert into booking values(&BID,'&toname','&toaddress',&weight,&Id)
new 1: insert into booking values(33,'yuvi','xyz jkl',20,3)
insert into booking values(33,'yuvi','xyz jkl',20,3)
ERROR at line 1:
ORA-00001: unique constraint (AMRUTH.PK_BOOKINGID) violated
SQL> /
Enter value for bid: 34
Enter value for toname: yuvi
Enter value for toaddress: xyz jkl
Enter value for weight: 20
Enter value for id: 3
old 1: insert into booking values(&BID,'&toname','&toaddress',&weight,&Id)
     1: insert into booking values(34, 'yuvi', 'xyz jkl',20,3)
1 row created.
SQL> /
Enter value for bid: 35
Enter value for toname: chahal
Enter value for toaddress: xyz mno
Enter value for weight: 25
Enter value for id: 4
old 1: insert into booking values(&BID,'&toname','&toaddress',&weight,&Id)
new 1: insert into booking values(35,'chahal','xyz mno ',25,4)
1 row created.
SQL> commit;
Commit complete.
```

```
SQL> desc schedule;
Name
                                           Null?
                                                    Type
SHID
                                          NOT NULL NUMBER
BID
                                                    NUMBER
SID
                                                    NUMBER
ID
                                                    NUMBER
SQL> select * from schedule;
     SHID
                 BID
                            SID
                                         ID
       41
                  31
                            21
                                         1
       42
                  32
                             22
                                          2
       43
                   33
                             21
                                          2
SQL> insert into schedule values(&shid,&bid,&sid,&id);
Enter value for shid: 44
Enter value for bid: 34
Enter value for sid: 24
Enter value for id: 3
old 1: insert into schedule values(&shid,&bid,&sid,&id)
     1: insert into schedule values(44,34,24,3)
1 row created.
SQL> /
Enter value for shid: 45
Enter value for bid: 35
Enter value for sid: 25
Enter value for id: 4
    1: insert into schedule values(&shid,&bid,&sid,&id)
     1: insert into schedule values(45,35,25,4)
1 row created.
SQL> commit;
Commit complete.
SQL>
```

```
SQL> desc delivery;
                                           Null?
Name
                                                    Type
DID
                                           NOT NULL NUMBER
BID
                                          NOT NULL NUMBER
SELECTION
                                                    VARCHAR2(10)
SQL> select * from delivery;
      DID
                 BID SELECTION
       51
                  31 YES
       54
                  31 NO
       52
                  31 YES
       53
                  33 No
SQL> insert into delivery values(&did,&bid,'&selection');
Enter value for did: 55
Enter value for bid: 34
Enter value for selection: NO
old 1: insert into delivery values(&did,&bid,'&selection')
     1: insert into delivery values(55,34,'NO')
1 row created.
SQL> /
Enter value for did: 56
Enter value for bid: 35
Enter value for selection: YES
old 1: insert into delivery values(&did,&bid,'&selection')
     1: insert into delivery values(56,35,'YES')
1 row created.
SQL> commit;
Commit complete.
SQL>
```

601		* 6					ľ
SQL> se.	.ect	* from sched	dule;				
SH	lID	BID	SID	ID			
	41	31	21	1			
	44		24	3			
	42	32	22	2			
		33		2			
	45	35	25	4			
SQL> se	lect	* from deliv	very;				
Ι	OID	BID SI	ELECTION				
	51	31 YI	ES				
	54	31 NO)				
	52	31 YI	ES				
		33 No					
		34 NO					
	56	35 YI	ES				
6 rows s	ele	cted.					
SQL> se	lect	* from brand	ch;				
	TD	BRANCH_NAME		BRANCH_(CODE		
BRANCH_A	ADDR	ESS					
	1	branch1		BR100			
abc xyz	_	DI GIICIII		DK100			
ahla	3	branch3		BR!02			
ghl xyz							
	4	branch4		BR103			
jkl xyz							
	TD	BRANCH_NAME		BRANCH_(CODE		
BRANCH_A	ADDR	ESS					
	2	branch2		BR101			
abc abc							
	_	h n a n a h F		DD101			
mno xvz	5	branch5		BR104			
mno xyz						ĺ	

```
SQL> select * from staff;

SID STAFF_NAME STAFF_CONTACT

21 Sachin 9999999991
22 jack 999999999
23 john 999999998
24 warner 999999999
25 smith 9999999994

SQL> select * from booking;

BID TONAME TOADDRESS WEIGHT ID

31 root xyz abc 10 1
33 ramesh ptr ptr 55 1
32 amruth pqr pqr 54 2
34 yuvi xyz jkl 20 3
35 chahal xyz mno 25 4

SQL>
```

IMPLEMENTATION

Front end programs and its connectivity

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database and is oriented towards relational databases.

The connection to the database can be performed using Java programming (JDBC API) as:

Thus, the connection from Java to Oracle database is performed and therefore, can be used for updating tables in the database directly.

MAIN METHOD:

```
import java.awt.FlowLayout;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.Label;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JMenu;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
public class dbmsUI extends JFrame{
         */
        private static final long serialVersionUID = 1L;
        private JMenuBar mnu;
        private JMenu mnuBranch;
        private JMenu mnuSchedule;
        private JMenu mnuBooking;
        private JMenu mnuStaff;
        private JMenu mnuDelivery;
        private JMenu mnuorder_Det;
//
//
        private JMenu mnuuser_orderDet;
        private JMenuItem insert1,update1,delete1,view1;
        private JMenuItem insert2,update2,delete2,view2;
        private JMenuItem insert3,update3,delete3,view3;
        private JMenuItem insert4,update4,delete4,view4;
        private JMenuItem insert5,update5,delete5,view5;
//
        private JMenuItem insert6,update6,delete6,view6;
        private JMenuItem insert7,update7,delete7,view7;
        private JLabel labelName;
        private static JPanel p0,p1;
        void initialize() {
                mnu=new JMenuBar();
                mnuBranch= new JMenu("Branch");
                mnuStaff= new JMenu("Staff");
                mnuSchedule= new JMenu("Schedule");
                mnuDelivery= new JMenu("Delivery");
                mnuBooking= new JMenu("Booking");
                 mnuuser orderDet= new JMenu("User orderDet");
//
                labelName=new JLabel("COURIER MANAGEMENT SYSTEM");
                 p1=new JPanel();
                 p0=new JPanel();
                insert1=new JMenuItem("Insert");
                 update1=new JMenuItem("Update");
                delete1=new JMenuItem("Delete");
                view1=new JMenuItem("View");
                insert2=new JMenuItem("Insert");
                update2=new JMenuItem("Update");
 1602-19-737-06 te2=new JMenuItem("Delete");
 M Amruth Sai view2=new JMenuItem("View");
```

```
insert3=new JMenuItem("Insert");
                update3=new JMenuItem("Update");
                delete3=new JMenuItem("Delete");
                view3=new JMenuItem("View");
                insert4=new JMenuItem("Insert");
                update4=new JMenuItem("Update");
                delete4=new JMenuItem("Delete");
                view4=new JMenuItem("View");
                insert5=new JMenuItem("Insert");
                update5=new JMenuItem("Update");
                delete5=new JMenuItem("Delete");
                view5=new JMenuItem("View");
                insert6=new JMenuItem("Insert");
                update6=new JMenuItem("Update");
                delete6=new JMenuItem("Delete");
                view6=new JMenuItem("View");
                insert7=new JMenuItem("Insert");
                update7=new JMenuItem("Update");
                delete7=new JMenuItem("Delete");
                view7=new JMenuItem("View");
                insert1=new JMenuItem("Insert");
                update1=new JMenuItem("Update");
        delete1=new JMenuItem("Delete");
                view1=new JMenuItem("View"); */
        void addComponentsToFrame() {
                 mnuBranch.add(insert1);
                 mnuBranch.add(delete1);
                 mnuBranch.add(update1);
                 mnuBranch.add(view1);
                 mnuStaff.add(insert2);
                 mnuStaff.add(delete2);
                 mnuStaff.add(update2);
                 mnuStaff.add(view2);
                 mnuSchedule.add(insert3);
                 mnuSchedule.add(delete3);
                 mnuSchedule.add(update3);
                 mnuSchedule.add(view3);
                 mnuDelivery.add(insert4);
                 mnuDelivery.add(delete4);
                 mnuDelivery.add(update4);
                 mnuDelivery.add(view4);
                 mnuBooking.add(insert5);
                 mnuBooking.add(delete5);
                 mnuBooking.add(update5);
                 mnuBooking.add(view5);
                 mnuorder_Det.add(insert6);
                 mnuorder_Det.add(delete6);
                 mnuorder_Det.add(update6);
                 mnuorder Det.add(view6);
                 mnuuser_orderDet.add(insert7);
                 mnuuser orderDet.add(delete7);
                 mnuuser_orderDet.add(update7);
                 mnuuser orderDet.add(view7);
                 mnu.add(mnuDelivery);
                 mnu.add(mnuBooking);
                 mnu.add(mnuStaff);
                 mnu.add(mnuSchedule);
                 mnu.add(mnuBranch);
//
                 mnu.add(mnuorder_Det);
//
                 mnu.add(mnuuser_orderDet);
                 setJMenuBar(mnu);
                 p1.add(labelName);p1.setAlignmentY(CENTER_ALIGNMENT);
 1602-19-737-066setBounds(500,500,800,100);
 M Amruth Sai p0.add(p1);
```

```
Student Assignments
                 p0.setBackground(Color.lightGray);
                 add(p0);
void closeWindow(){
                 try {
                         int a=JOptionPane.showConfirmDialog(this,"Are you sure want to Quit Courier Management System:");
                         if(a==JOptionPane.YES_OPTION){
                                  JOptionPane.showMessageDialog(this,
                                             "Thank you!\nExiting Courier Management System","Quit",
                                             JOptionPane.WARNING_MESSAGE);
                                  System.exit(0);
                         else if (a== JOptionPane.NO_OPTION) {
                                  setDefaultCloseOperation(JFrame.DO_NOTHING_ON_CLOSE);
                         else if (a== JOptionPane.CANCEL_OPTION) {
                                  setDefaultCloseOperation(JFrame.DO_NOTHING_ON_CLOSE);
                }
                         catch(Exception e) {
                                  System.out.println(e);
        void register() {
    Branch log=new Branch(p0,dbmsUI.this,insert1,delete1,update1,view1);
                 log.buildGUI();
                 Staff user=new Staff(p0,dbmsUI.this,insert2,delete2,update2,view2);
                 user.buildGUI();
                 Booking umed=new Booking(p0,dbmsUI.this,insert5,update5,view5,delete5);
                 umed.buildGUI();
                 Delivery log_user=new Delivery(p0,dbmsUI.this,insert4,update4,view4,delete4);
                 log_user.buildGUI();
                 Schedule med=new Schedule(p0,dbmsUI.this,insert3,update3,view3,delete3);
                 med.buildGUI(); /*
                 Booking umed=new Booking(p0,dbmsUI.this,insert5,delete5,update5,view5);
                 umed.buildGUI();
                 orderDetails orders=new orderDetails(p0,EMedUI.this,insert6,delete6,update6,view6);
                 orders.buildGUI();
                 UserOrderDetails u_orders=new UserOrderDetails(p0,EMedUI.this,insert7,delete7,update7,view7);
                 u_orders.buildGUI(); */
                 addWindowListener(new WindowAdapter(){
                         public void windowClosing(WindowEvent we)
                                  closeWindow();
                });
public dbmsUI() {
                 initialize();
                 addComponentsToFrame();
                 register();
                 pack();
        //
                 setBackground(Color.RED);
                 setTitle("Courier Management System");
```

BRANCH: 1602-19-737-066 M Amruth Sai

}

setSize(800,800);
setVisible(true);

```
Student Assignments
```

```
package dbms;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.FlowLayout;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.Label;
import java.awt.List;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
import java.awt.event.ltemListener;
import java.sql.*;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import javax.swing.JTextField;
import javax.swing.table.DefaultTableModel;
public class Branch{
        */
//
        private static final long serialVersionUID = 1L;
        private JButton insertButton, deleteButton, viewButton, updateButton;
        private JPanel p1,p2,p3,p;
        private JLabel Iblid, Iblname, Iblcode, Ibladdress;
        private JTextField txtid,txtname,txtcode,txtaddress;
        private List BIDList;
        Connection con; ResultSet rs;
        Statement statement;
        private JFrame frame;
        private JMenuItem insert, delete, update, view;
        public Branch(JPanel p,JFrame frame,JMenuItem insert,JMenuItem delete,JMenuItem update,JMenuItem
view)
        {
                try
                {
                        Class.forName("oracle.jdbc.driver.OracleDriver");
                catch (Exception e)
                        System.err.println("Unable to find and load driver");
                        System.exit(1);
                connectToDB();
                this.frame=frame;
                this.insert=insert;
 1602-19-737-this delete=delete;
                this.update=update;
 M Amruth Sai
```

```
Student Assignments
               this.view=view;
               lblid=new JLabel("Branch ID");
               lblname=new JLabel("Branch Name");
               lblcode=new JLabel("Branch Code");
               lbladdress=new JLabel("Branch Address");
               txtid=new JTextField(15);
               txtname=new JTextField(15);
               txtcode=new JTextField(8);
               txtaddress=new JTextField(15);
               this.p=p;
       }
       public void connectToDB()
  {
               try {
               Connection con=DriverManager.getConnection(
                "jdbc:oracle:thin:@localhost:1521:xe","amruth","vasavi");
               statement=con.createStatement();
               statement.executeUpdate("commit");
               catch (SQLException connectException)
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
               }
  }
       private void displaySQLErrors(SQLException e)
               JOptionPane.showMessageDialog(p,"\nSQLException: " + e.getMessage() + "\n"+"SQLState:
e.getSQLState() + "\n"+"VendorError: " + e.getErrorCode() + "\n");
       }
       public void loadBIDs() {
               try {
                       BIDList.removeAll();
                       rs=statement.executeQuery("select Id from Branch");
                       while(rs.next()) {
                               BIDList.add(rs.getString("ID"));
               catch(SQLException e) {
                       displaySQLErrors(e);
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
      }
      public void buildGUI() {
              insert.addActionListener(new ActionListener() {
                      @Override
                      public void actionPerformed(ActionEvent arg0) {
                              // TODO Auto-generated method stub
                              insertButton=new JButton("Insert");
                              txtid.setText(null);
                              txtname.setText(null);
                              txtcode.setText(null);
                              txtaddress.setText(null);
                              p.removeAll();
                              frame.invalidate();
                              frame.validate();
                              frame.repaint();
                              p1=new JPanel();
                               p1.setLayout(new GridLayout(4,2));
                               p1.add(lblid);
                               p1.add(txtid);
                               p1.add(lblname);
                               p1.add(txtname);
                               p1.add(lblcode);
                               p1.add(txtcode);
                               p1.add(lbladdress);
                               p1.add(txtaddress);
                               p3=new JPanel(new FlowLayout());
                               p3.add(insertButton);
                               //p1.add(txtf1);
                               p3.setBackground(Color.yellow);
                               p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                               p1.setBackground(Color.pink);
                               p2 = new JPanel(new FlowLayout());
                                       BIDList=new List(10);
                                       loadBIDs();
                                       p2.add(BIDList);p2.setBackground(Color.cyan);
                                       p2.setBounds(450,150,350,180);
                               p.add(p1);p.add(p3);
                               p.add(p2);
1602-19-737-066
M Amruth Sai
```

```
p.setLayout(new BorderLayout());
                                       frame.add(p);
                                       frame.setSize(800,800);
                                       frame.validate();
                                insertButton.addActionListener(new ActionListener() {
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                       // TODO Auto-generated method stub
                               try {
                                        String query="INSERT INTO BRANCH
VALUES("+txtid.getText()+",""+txtname.getText()+"",""+txtcode.getText()+"",""+txtaddress.getText()+"")";
                                       int i=statement.executeUpdate(query);
                                       JOptionPane.showMessageDialog(p,"\ninserted "+i+" rows
succesfully");loadBIDs();
                               catch(SQLException insertException){
                                       displaySQLErrors(insertException);
                                }
                                       });
                       });
               delete.addActionListener(new ActionListener() {
                        @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               deleteButton=new JButton("Delete");
                               txtid.setText(null);
                               txtname.setText(null);
                               txtcode.setText(null);
                               txtaddress.setText(null);
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
                               p1=new JPanel();
                                p1.setLayout(new GridLayout(4,2));
                                p1.add(lblid);
                                p1.add(txtid);
                                p1.add(lblname);
 1602-19-737-066
                                p1.add(txtname);
 M Amruth Sai
```

```
Student Assignments
                                p1.add(lblcode);
                                p1.add(txtcode);
                                p1.add(lbladdress);
                                p1.add(txtaddress);
                                p3=new JPanel(new FlowLayout());
                                p3.add(deleteButton);
                                //p1.add(txtf1);
                                p3.setBackground(Color.yellow);
                                p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                p1.setBackground(Color.pink);
                               // p1.setBounds(100,100,500,300);
                                p2 = new JPanel(new FlowLayout());
                                        BIDList=new List(10);
                                        loadBIDs();
                                        p2.add(BIDList);p2.setBackground(Color.cyan);
                                        p2.setBounds(450,150,350,180);
                                p. add(p1);p.add(p3);
                                p. add(p2);
                                 BIDList.addItemListener(new ItemListener()
                                               public void itemStateChanged(ItemEvent e)
                                                       try
                                                               rs=statement.executeQuery("select * from Branch");
                                                               while (rs.next())
                                                                       if
(rs.getString("Id").equals(BIDList.getSelectedItem()))
                                                                       break;
                                                               if (!rs.isAfterLast())
                                                                       txtid.setText(rs.getString("Id"));
       txtname.setText(rs.getString("branch_name"));
                                                                       txtcode.setText(rs.getString("branch_code"))
       txtaddress.setText(rs.getString("branch_address"));
                                                       catch (SQLException selectException)
                                                               displaySQLErrors(selectException);
                                               }
                                       });
                                p.setLayout(new BorderLayout());
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
```

```
frame.add(p);
                               frame.setSize(800,800);
                               frame.validate();
                                deleteButton.addActionListener(new ActionListener() {
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                      // TODO Auto-generated method stub
                               try {
                                       int a=JOptionPane.showConfirmDialog(p,"Are you sure want to delete:");
                                       if(a==JOptionPane.YES_OPTION){
                                       String query="DELETE FROM BRANCH WHERE
ID="+BIDList.getSelectedItem();
                                       int i=statement.executeUpdate(query);
                                       JOptionPane.showMessageDialog(p,"\nDeleted "+i+" rows
succesfully");loadBIDs();
                                       }
                               catch(SQLException deleteException){
                                       displaySQLErrors(deleteException);
                               }
                                       });
                       });
               update.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               JButton updateButton = new JButton("Update");
                               txtid.setText(null);
                               txtname.setText(null);
                               txtcode.setText(null);
                               txtaddress.setText(null);
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
                               p1=new JPanel();
                                p1.setLayout(new GridLayout(4,2));
                                p1.add(lblid);
                                p1.add(txtid);
                                p1.add(lblname);
                                p1.add(txtname);
 1602-19-737-066
                                p1.add(lblcode);
 M Amruth Sai
```

```
Student Assignments
                                p1.add(txtcode);
                                p1.add(lbladdress);
                                p1.add(txtaddress);
                                p3=new JPanel(new FlowLayout());
                                p3.add(updateButton);
                                //p1.add(txtf1);
                                p3.setBackground(Color.yellow);
                                p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                p1.setBackground(Color.pink);
                                p2 = new JPanel(new FlowLayout());
                                        BIDList=new List(10);
                                        loadBIDs():
                                        p2.add(BIDList);p2.setBackground(Color.cyan);
                                        p2.setBounds(450,150,350,180);
                                p. add(p1);p.add(p3);
                                p. add(p2);
                                BIDList.addItemListener(new ItemListener()
                                               public void itemStateChanged(ItemEvent e)
                                                       try
                                                               rs=statement.executeQuery("select * from Branch");
                                                               while (rs.next())
                                                                       if
(rs.getString("Id").equals(BIDList.getSelectedItem()))
                                                                       break;
                                                               if (!rs.isAfterLast())
                                                                       txtid.setText(rs.getString("ID"));
       txtname.setText(rs.getString("Branch_name"));
        txtcode.setText(rs.getString("Branch_code"));
        txtaddress.setText(rs.getString("Branch_address"));
                                                               }
                                                       catch (SQLException selectException)
                                                               displaySQLErrors(selectException);
                                               }
                                       });
                                p.setLayout(new BorderLayout());
                               frame.add(p);
                               frame.setSize(800,800);
                               frame.validate();
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                               updateButton.addActionListener(new ActionListener() {
                                       @Override
                                              public void actionPerformed(ActionEvent e) {
                                                      // TODO Auto-generated method stub
                                               try {
                                                              int a=JOptionPane.showConfirmDialog(p,"Are you
sure want to update:");
                                                              if(a==JOptionPane.YES_OPTION){
                                                              String query="update Branch set
Branch_name=""+txtname.getText()+"',Branch_code=""+txtcode.getText()+"',Branch_address=""+txtaddress.getText()+
"' WHERE ID="+BIDList.getSelectedItem();
                                                              int i=statement.executeUpdate(query);
                                                              JOptionPane.showMessageDialog(p,"\nupdated
"+i+" rows succesfully");loadBIDs();
                                                              }
                                                      catch(SQLException deleteException){
                                                              displaySQLErrors(deleteException);
                               }
                                      });
                       });
               view.addActionListener(new ActionListener(){
                       @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
                               Label view1=new Label("View");
                               //view1.setAlignment(Label.CENTER);
                               Font myFont = new Font("Serif",Font.BOLD,25);
                               view1.setFont((myFont));
                               viewButton=new JButton("View");
                               p1=new JPanel();
                               p2=new JPanel();
                               p1.add(view1);
                               p2.add(viewButton);p1.setBackground(Color.cyan);p2.setBackground(Color.cyan);
                               p.add(p1);p.add(p2); p.setLayout(new FlowLayout());
                               frame.add(p);
```

frame.setSize(800,800);

@Override

viewButton.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

// TODO Auto-generated method stub

frame.validate();

1602-19-737-066 M Amruth Sai

```
Student Assignments
                                               JFrame f;
                                                 JTable j;
                                                   f = new JFrame();
                                                   f.setTitle("Branch details");
                                                   DefaultTableModel model = new DefaultTableModel();
                                                   j = new JTable(model);
                                                   model.addColumn("Branch Id");
                                                   model.addColumn("Branch Name");
                                                   model.addColumn("Branch Code");
                                                   model.addColumn("Branch Address");
                                                   try {
                                                                      rs=statement.executeQuery("select * from
Branch");
                                                                      while(rs.next()) {
                                                                               model.addRow(new
Object[]{rs.getString("Id"), rs.getString("Branch_name"),rs.getString("Branch_code"),rs.getString("Branch_address")});
                                                              catch(SQLException viewException) {
                                                                      displaySQLErrors(viewException);
                                                              j.setEnabled(false);
                                                   j.setBounds(30, 40, 300, 300);
                                                   JScrollPane sp = new JScrollPane(j);
                                                   f.add(sp);
                                                   f.setSize(800, 400);
                                                   f.setVisible(true);
                                                 }
                                       });
                       }
               });
       }
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
```

}

STAFF:

```
package dbms;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.FlowLayout;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.Label;
import java.awt.List;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ltemEvent;
import java.awt.event.ltemListener;
import java.sql.*;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import javax.swing.JTextField;
import javax.swing.table.DefaultTableModel;
public class Staff{
        /**
//
        private static final long serialVersionUID = 1L;
        private JButton insertButton, deleteButton, viewButton, updateButton;
        private JPanel p1,p2,p3,p;
        private JLabel Iblid, Iblname, Iblcontact;
        private JTextField txtid,txtname,txtcontact;
        private List SIDList;
        Connection con; ResultSet rs;
        Statement statement;
        private JFrame frame;
        private JMenuItem insert,delete,update,view;
        public Staff(JPanel p, JFrame frame, JMenuItem insert, JMenuItem delete, JMenuItem update, JMenuItem view)
                try
                        Class.forName("oracle.jdbc.driver.OracleDriver");
                catch (Exception e)
                        System.err.println("Unable to find and load driver");
 1602-19-737-066
                        System.exit(1);
 M Amruth Sai
```

```
Student Assignments
               connectToDB();
               this.frame=frame;
               this.insert=insert:
               this.delete=delete;
               this.update=update;
               this.view=view;
               lblid=new JLabel("Staff ID");
               lbIname=new JLabel("Staff Name");
               lblcontact=new JLabel("Staff Contact");
               txtid=new JTextField(15);
               txtname=new JTextField(15);
               txtcontact=new JTextField(8);
//
               txtaddress=new JTextField(15);
               this.p=p;
       }
       public void connectToDB()
               try {
               Connection con=DriverManager.getConnection(
                "jdbc:oracle:thin:@localhost:1521:xe","amruth","vasavi");
               statement=con.createStatement();
               statement.executeUpdate("commit");
               }
               catch (SQLException connectException)
                 System.out.println(connectException.getMessage());
                 System.out.println(connectException.getSQLState());
                 System.out.println(connectException.getErrorCode());
                 System.exit(1);
  }
       private void displaySQLErrors(SQLException e)
               JOptionPane.showMessageDialog(p,"\nSQLException: " + e.getMessage() + "\n"+"SQLState:
e.getSQLState() + "\n"+"VendorError: " + e.getErrorCode() + "\n");
       public void loadSIDs() {
               try {
                       SIDList.removeAll();
                       rs=statement.executeQuery("select sid from Staff");
 1602-19-737-066
                       while(rs.next()) {
 M Amruth Sai
```

```
Student Assignments
                                SIDList.add(rs.getString("sid"));
                catch(SQLException e) {
                        displaySQLErrors(e);
                }
        }
        public void buildGUI() {
                insert.addActionListener(new ActionListener() {
                        @Override
                        public void actionPerformed(ActionEvent arg0) {
                                // TODO Auto-generated method stub
                                insertButton=new JButton("Insert");
                                txtid.setText(null);
                                txtname.setText(null);
                                txtcontact.setText(null);
//
                                txtaddress.setText(null);
                                p.removeAll();
                                frame.invalidate();
                                frame.validate();
                                frame.repaint();
                                p1=new JPanel();
                                 p1.setLayout(new GridLayout(4,2));
                                p1.add(lblid);
                                p1.add(txtid);
                                 p1.add(lblname);
                                 p1.add(txtname);
                                 p1.add(lblcontact);
                                 p1.add(txtcontact);
//
                                p1.add(lbladdress);
//
                                 p1.add(txtaddress);
                                 p3=new JPanel(new FlowLayout());
                                 p3.add(insertButton);
                                 //p1.add(txtf1);
                                p3.setBackground(Color.yellow);
                                 p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                 p1.setBackground(Color.pink);
                                 p2 = new JPanel(new FlowLayout());
                                         SIDList=new List(10);
                                         loadSIDs();
                                         p2.add(SIDList);p2.setBackground(Color.cyan);
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                        p2.setBounds(450,150,350,180);
                                p.add(p1);p.add(p3);
                                p.add(p2);
                                p.setLayout(new BorderLayout());
                                       frame.add(p);
                                       frame.setSize(800,800);
                                       frame.validate();
                                insertButton.addActionListener(new ActionListener() {
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                       // TODO Auto-generated method stub
                               try {
                                       String query="INSERT INTO STAFF
VALUES("+txtid.getText()+",""+txtname.getText()+"',""+txtcontact.getText()+"')";
                                       int i=statement.executeUpdate(query);
                                       JOptionPane.showMessageDialog(p,"\ninserted "+i+" rows
succesfully");loadSIDs();
                               catch(SQLException insertException){
                                       displaySQLErrors(insertException);
                               }
                                }
                                       });
                       });
       delete.addActionListener(new ActionListener() {
                        @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               deleteButton=new JButton("Delete");
                               txtid.setText(null);
                               txtname.setText(null);
                               txtcode.setText(null);
                               txtaddress.setText(null);
                               p.removeAll();
                               frame.invalidate();
```

1602-19-737-066 M Amruth Sai

p1=new JPanel();

frame.validate();
frame.repaint();

```
p1.setLayout(new GridLayout(4,2));
                                p1.add(lblid);
                                p1.add(txtid);
                                p1.add(lblname);
                                p1.add(txtname);
                                p1.add(lblcode);
                                p1.add(txtcode);
                                p1.add(lbladdress);
                                p1.add(txtaddress);
                                p3=new JPanel(new FlowLayout());
                                p3.add(deleteButton);
                                //p1.add(txtf1);
                                p3.setBackground(Color.yellow);
                                p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                p1.setBackground(Color.pink);
                                // p1.setBounds(100,100,500,300);
                                p2 = new JPanel(new FlowLayout());
                                        BIDList=new List(10);
                                        loadBIDs();
                                        p2.add(BIDList);p2.setBackground(Color.cyan);
                                        p2.setBounds(450,150,350,180);
                                p. add(p1);p.add(p3);
                                p. add(p2);
                                 BIDList.addItemListener(new ItemListener()
                                                public void itemStateChanged(ItemEvent e)
                                                        try
                                                                rs=statement.executeQuery("select * from Branch");
                                                               while (rs.next())
                                                                        if
(rs.getString("Id").equals(BIDList.getSelectedItem()))
                                                                        break;
                                                                if (!rs.isAfterLast())
                                                                        txtid.setText(rs.getString("Id"));
        txtname.setText(rs.getString("branch_name"));
                                                                        txtcode.setText(rs.getString("branch_code"))
        txtaddress.setText(rs.getString("branch_address"));
                                                               }
                                                        catch (SQLException selectException)
 1602-19-737-066
                                                               displaySQLErrors(selectException);
 M Amruth Sai
```

```
Student Assignments
                                                      }
                                               }
                                       });
                                p.setLayout(new BorderLayout());
                               frame.add(p);
                               frame.setSize(800,800);
                               frame.validate();
                                deleteButton.addActionListener(new ActionListener() {
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                       // TODO Auto-generated method stub
                               try {
                                       int a=JOptionPane.showConfirmDialog(p,"Are you sure want to delete:");
                                       if(a==JOptionPane.YES_OPTION){
                                       String query="DELETE FROM BRANCH WHERE
ID="+BIDList.getSelectedItem();
                                       int i=statement.executeUpdate(query);
                                       JOptionPane.showMessageDialog(p,"\nDeleted "+i+" rows
succesfully");loadBIDs();
                                       }
                               catch(SQLException deleteException){
                                       displaySQLErrors(deleteException);
                               }
                                }
                                       });
                       });
*/
               delete.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               deleteButton=new JButton("Delete");
                               txtid.setText(null);
                               txtname.setText(null);
                               txtcontact.setText(null);
//
                               txtaddress.setText(null);
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
 1602-19-737-066
                               p1=new JPanel();
 M Amruth Sai
```

```
Student Assignments
                                 p1.setLayout(new GridLayout(4,2));
                                 p1.add(lblid);
                                 p1.add(txtid);
                                 p1.add(lblname);
                                 p1.add(txtname);
                                 p1.add(lblcontact);
                                 p1.add(txtcontact);
//
                                 p1.add(lbladdress);
//
                                 p1.add(txtaddress);
                                 p3=new JPanel(new FlowLayout());
                                 p3.add(deleteButton);
                                 //p1.add(txtf1);
                                 p3.setBackground(Color.yellow);
                                 p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                 p1.setBackground(Color.pink);
                                // p1.setBounds(100,100,500,300);
                                p2 = new JPanel(new FlowLayout());
                                         SIDList=new List(10);
                                         loadSIDs();
                                         p2.add(SIDList);p2.setBackground(Color.cyan);
                                         p2.setBounds(450,150,350,180);
                                 p. add(p1);p.add(p3);
                                 p. add(p2);
                                 SIDList.addItemListener(new ItemListener()
                                                public void itemStateChanged(ItemEvent e)
                                                        try
                                                                rs=statement.executeQuery("select * from Staff");
                                                                while (rs.next())
                                                                        if
(rs.getString("sid").equals(SIDList.getSelectedItem()))
                                                                        break;
                                                                if (!rs.isAfterLast())
                                                                        txtid.setText(rs.getString("sid"));
                                                                        txtname.setText(rs.getString("staff_name"));
        txtcontact.setText(rs.getString("staff_contact"));
//
                                                                txtaddress.setText(rs.getString("branch_address"));
                                                        catch (SQLException selectException)
                                                                displaySQLErrors(selectException);
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                               }
                                       });
                                p.setLayout(new BorderLayout());
                               frame.add(p);
                               frame.setSize(800,800);
                               frame.validate();
                                deleteButton.addActionListener(new ActionListener() {
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                      // TODO Auto-generated method stub
                               try {
                                       int a=JOptionPane.showConfirmDialog(p,"Are you sure want to delete:");
                                       if(a==JOptionPane.YES_OPTION){
                                       String query="DELETE FROM STAFF WHERE
SID="+SIDList.getSelectedItem();
                                       int i=statement.executeUpdate(query);
                                       JOptionPane.showMessageDialog(p,"\nDeleted "+i+" rows
succesfully");loadSIDs();
                                       }
                               catch(SQLException deleteException){
                                       displaySQLErrors(deleteException);
                                }
                                       });
                       });
               update.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               JButton updateButton = new JButton("Update");
                               txtid.setText(null);
                               txtname.setText(null);
                               txtcontact.setText(null);
//
                               txtaddress.setText(null);
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
                               p1=new JPanel();
 1602-19-737-066
                                p1.setLayout(new GridLayout(4,2));
 M Amruth Sai
```

```
Student Assignments
                                 p1.add(lblid);
                                 p1.add(txtid);
                                 p1.add(lblname);
                                 p1.add(txtname);
                                 p1.add(lblcontact);
                                 p1.add(txtcontact);
//
                                 p1.add(lbladdress);
//
                                 p1.add(txtaddress);
                                 p3=new JPanel(new FlowLayout());
                                 p3.add(updateButton);
                                 //p1.add(txtf1);
                                 p3.setBackground(Color.yellow);
                                 p1.setBounds(115,80,300,250);p3.setBounds(200,350,75,35);
                                 p1.setBackground(Color.pink);
                                 p2 = new JPanel(new FlowLayout());
                                         SIDList=new List(10);
                                         loadSIDs();
                                         p2.add(SIDList);p2.setBackground(Color.cyan);
                                         p2.setBounds(450,150,350,180);
                                 p. add(p1);p.add(p3);
                                 p. add(p2);
                                 SIDList.addItemListener(new ItemListener()
                                                public void itemStateChanged(ItemEvent e)
                                                        try
                                                                rs=statement.executeQuery("select * from staff");
                                                                while (rs.next())
                                                                        if
(rs.getString("sid").equals(SIDList.getSelectedItem()))
                                                                        break;
                                                                if (!rs.isAfterLast())
                                                                        txtid.setText(rs.getString("sid"));
                                                                        txtname.setText(rs.getString("staff_name"));
        txtcontact.setText(rs.getString("staff_contact"));
//
        txtaddress.setText(rs.getString("Branch_address"));
                                                                }
                                                        catch (SQLException selectException)
                                                                displaySQLErrors(selectException);
                                                }
                                        });
                                 p.setLayout(new BorderLayout());
 1602-19-737-066
                                frame.add(p);
 M Amruth Sai
```

```
Student Assignments
                               frame.setSize(800,800);
                               frame.validate():
                               updateButton.addActionListener(new ActionListener() {
                                       @Override
                                              public void actionPerformed(ActionEvent e) {
                                                      // TODO Auto-generated method stub
                                               try {
                                                              int a=JOptionPane.showConfirmDialog(p,"Are you
sure want to update:");
                                                              if(a==JOptionPane.YES OPTION){
                                                              String query="update Staff set
staff_name=""+txtname.getText()+"',staff_contact=""+txtcontact.getText()+"' WHERE SID="+SIDList.getSelectedItem();
                                                              int i=statement.executeUpdate(query);
                                                              JOptionPane.showMessageDialog(p,"\nupdated
"+i+" rows succesfully");loadSIDs();
                                                              }
                                                      catch(SQLException deleteException){
                                                              displaySQLErrors(deleteException);
                                                      }
                               }
                                      });
                       });
               view.addActionListener(new ActionListener(){
                       @Override
                       public void actionPerformed(ActionEvent arg0) {
                               // TODO Auto-generated method stub
                               p.removeAll();
                               frame.invalidate();
                               frame.validate();
                               frame.repaint();
                               Label view1=new Label("View");
                               //view1.setAlignment(Label.CENTER);
                               Font myFont = new Font("Serif",Font.BOLD,25);
                               view1.setFont((myFont));
                               viewButton=new JButton("View");
                               p1=new JPanel();
                               p2=new JPanel();
                               p1.add(view1);
                               p2.add(viewButton);p1.setBackground(Color.cyan);p2.setBackground(Color.cyan);
                               p.add(p1);p.add(p2); p.setLayout(new FlowLayout());
                               frame.add(p);
                               frame.setSize(800,800);
                               frame.validate();
 1602-19-737-066
                               viewButton.addActionListener(new ActionListener() {
 M Amruth Sai
```

```
Student Assignments
                                        @Override
                                               public void actionPerformed(ActionEvent e) {
                                                       // TODO Auto-generated method stub
                                                JFrame f;
                                                  JTable j;
                                                    f = new JFrame();
                                                    f.setTitle("Staff details");
                                                    DefaultTableModel model = new DefaultTableModel();
                                                    j = new JTable(model);
                                                    model.addColumn("sid");
                                                    model.addColumn("staff_name");
                                                   model.addColumn("staff_contact");
                                                   model.addColumn("Branch Address");
       //
                                                   try {
                                                                       rs=statement.executeQuery("select * from
Staff");
                                                                       while(rs.next()) {
                                                                                model.addRow(new
Object[]{rs.getString("sid"), rs.getString("staff_name"),rs.getString("staff_contact")});
                                                               catch(SQLException viewException) {
                                                                       displaySQLErrors(viewException);
                                                               j.setEnabled(false);
                                                    j.setBounds(30, 40, 300, 300);
                                                    JScrollPane sp = new JScrollPane(j);
                                                    f.add(sp);
                                                    f.setSize(800, 400);
                                                    f.setVisible(true);
                                                  }
                                       });
                       }
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
```

```
}
 BOOKING:
package dbms;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.table.DefaultTableModel;
import java.sql.*;
import java.util.Properties;
public class Booking
       private JPanel pn,pn1,pn2,pn3;
       private JFrame iframe;
        private JButton JB_insert,JB_modify,JB_view,JB_delete;
        private JLabel JL_Booking_id,JL_Toname,JL_Weight,JL_Toaddress,JL_Branch_id;
        private JTextField JTF Booking id, JTF Toname, JTF Weight, JTF Toaddress, JTF Branch id;
        Connection con;
        ResultSet rs;
        Statement stmt:
        private JMenuItem insert2,update2,view2,delete2;
       private List BookingList;
       private Choice Branchid;//d 1
       public Booking(JPanel pn, JFrame jframe, JMenuItem insert2, JMenuItem update2, JMenuItem
view2,JMenuItem delete2)
       {
               try
                       Class.forName("oracle.jdbc.driver.OracleDriver");
               catch (Exception e)
                       System.err.println("Unable to find and load driver");
                       System.exit(1);
               connectDatabase();
               this.jframe=jframe;
               this.insert2=insert2;
               this.update2=update2;
               this.view2=view2;
               this.delete2=delete2:
               JL Booking id=new JLabel("Booking id:");
               JTF_Booking_id=new JTextField(10);
               JL_Toname=new JLabel("To Name:");
               JTF_Toname=new JTextField(10);
               JL_Weight=new JLabel("Weight:");
    JTF_Weight=new JTextField(10);
    JL_Toaddress=new JLabel("To Address:");
    JTF_Toaddress=new JTextField(10);
 160/1-1973/-165 new JLabel("Branch_id:");
M Amruth Sai
```

```
Student Assignments
    this.pn=pn;
       public void connectDatabase()
               try
                       Connection con=DriverManager.getConnection(
                       "jdbc:oracle:thin:@localhost:1521:xe","amruth","vasavi");
                       stmt=con.createStatement();
                       stmt.executeUpdate("commit");
               catch (SQLException connectException)
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
       private void displaySQLErrors(SQLException e)
               JOptionPane.showMessageDialog(pn1,"\nSQLException: " + e.getMessage() + "\n"+"SQLState:
e.getSQLState() + "\n"+"VendorError: " + e.getErrorCode() + "\n");
       public void loadbranch()
               try
                       Branchid=new Choice();
                       Branchid.removeAll();
                       rs=stmt.executeQuery("select * from branch");
                       while(rs.next())
                       {
                               Branchid.add(rs.getString("Id"));
               catch(SQLException e)
                       displaySQLErrors(e);
       public void loadbooking()
               try
                       BookingList=new List();
                       BookingList.removeAll();
                       rs=stmt.executeQuery("select * from booking");
                       while(rs.next())
                               BookingList.add(rs.getString("Bid"));
 1602-19-737-6atch(SQLException e)
 M Amruth Sai
```

```
displaySQLErrors(e);
      public void buildGUI()
              insert2.addActionListener(new ActionListener() {
                      @Override
                      public void actionPerformed(ActionEvent aevt)
                             JB_insert=new JButton("Insert");
                             JTF Booking id.setText(null);
                             JTF_Toname.setText(null);
                             JTF_Weight.setText(null);
                             JTF_Toaddress.setText(null);
                             JTF_Branch_id.setText(null);
                             loadbooking();
                             pn.removeAll();
                             jframe.invalidate();
                             iframe.validate();
                             iframe.repaint();
                             pn1=new JPanel();
                             pn1.setLayout(new GridLayout(10,10));
                             pn1.add(JL_Booking_id);
                             pn1.add(JTF_Booking_id);
                             pn1.add(JL_Toname);
                             pn1.add(JTF_Toname);
                             pn1.add(JL_Weight);
                             pn1.add(JTF_Weight);
                             pn1.add(JL_Toaddress);
                             pn1.add(JTF Toaddress);
                             pn1.add(JL_Branch_id);
                             pn1.add(JTF_Branch_id);
                             pn3=new JPanel(new FlowLayout());
                             pn3.add(JB insert);
                             pn1.setBounds(115,80,300,250);
                             pn3.setBounds(200,350,75,35);
                             pn2=new JPanel(new FlowLayout());
                             BookingList=new List(10);
                             loadbooking();
                             pn2.add(BookingList);
                             pn2.setBounds(200,350,300,180);
                             pn.add(pn1);
                             pn.add(pn3);
                             pn.add(pn2);
                              pn.setLayout(new BorderLayout());
                             iframe.add(pn);
                             jframe.setSize(800,800);
                             jframe.validate();
1602-19-737-066
```

```
Student Assignments
                               JB_insert.addActionListener(new ActionListener() {
                                       @Override
                                       public void actionPerformed(ActionEvent aevt)
                                              try
                                              {
                                                      String query= "INSERT INTO Booking VALUES("+
JTF_Booking_id.getText() + ",'"+JTF_Toname.getText() +"',"+JTF_Toaddress.getText()+"',"+JTF_Weight.getText()
+","+JTF_Branch_id.getText()+")";
                                                      int i = stmt.executeUpdate(query);
                                                      JOptionPane.showMessageDialog(pn,"\nInserted "+i+" rows
successfully");
                                                      loadbooking();
                                                      System.out.println("Done");
                                              }
                                              catch(SQLException e)
                                                      displaySQLErrors(e);
                                              }
                                      }
                              });
               update2.addActionListener(new ActionListener() {
                       public void actionPerformed(ActionEvent aevt)
                               JB_modify=new JButton("Modify");
                               JTF Booking id.setText(null);
                               JTF_Toname.setText(null);
                               JTF_Weight.setText(null);
                               JTF_Toaddress.setText(null);
                               JTF_Branch_id.setText(null);
                               pn.removeAll();
                               iframe.invalidate();
                               iframe.validate();
                               iframe.repaint();
                               pn1=new JPanel();
                               pn1.setLayout(new GridLayout(10,10));
                               pn1.add(JL Booking id);
                               pn1.add(JTF_Booking_id);
                               pn1.add(JL_Toname);
                               pn1.add(JTF_Toname);
                               pn1.add(JL_Weight);
                               pn1.add(JTF Weight);
                               pn1.add(JL_Toaddress);
                               pn1.add(JTF_Toaddress);
                               pn1.add(JL_Branch_id);
```

1602-19-737-066 M Amruth Sai pn3.add(JB_modify); pn1.setBounds(115,80,300,250); pn3.setBounds(200,350,75,35);

pn3=new JPanel(new FlowLayout());

pn1.add(JTF_Branch_id);

```
Student Assignments
                                pn2=new JPanel(new FlowLayout());
                                BookingList=new List(10);
                                loadbooking();
                                pn2.add(BookingList);
                                pn2.setBounds(200,350,300,180);
                                pn.add(pn1);
                                pn.add(pn3);
                                pn.add(pn2);
                                pn.setLayout(new BorderLayout());
                                iframe.add(pn);
                                iframe.setSize(800,800);
                                jframe.validate();
                                BookingList.addItemListener(new ItemListener() {
                                        public void itemStateChanged(ItemEvent ievt)
                                                try
                                                {
                                                        rs=stmt.executeQuery("select * from Booking");
                                                        while (rs.next())
                                                                if
(rs.getString("Bid").equals(BookingList.getSelectedItem()))
                                                                break;
                                                        if (!rs.isAfterLast())
                                                                JTF_Booking_id.setText(rs.getString("Bid"));
                                                                JTF_Toname.setText(rs.getString("ToName"));
                                                                JTF_Weight.setText(rs.getString("Weight"));
                                                                JTF_Toaddress.setText(rs.getString("ToAddress"));
                                                                JTF Branch id.setText(rs.getString("Id"));
                                                        }
                                                catch (SQLException selectException)
                                                        displaySQLErrors(selectException);
                                                }
                                        }
                                JB modify.addActionListener(new ActionListener() {
                                        @Override
                                        public void actionPerformed(ActionEvent aevt)
                                                 try
                                                        int a=JOptionPane.showConfirmDialog(pn,"Are you sure
want to update:");
                                                        if(a==JOptionPane.YES_OPTION)
                                                                String pack=JOptionPane.showInputDialog(pn,"Enter
New Name:");
                                                                JTF Toname.setText(pack);
                                                                String query="update booking set
    02-19-737-066
lame="+pack+" where Bid="+JTF_Booking_id.getText();
Amruth Sai
```

```
Student Assignments
                                                             int i=stmt.executeUpdate(query);
                                                             JOptionPane.showMessageDialog(pn,"\nUpdated
"+i+" rows succesfully");
                                                             loadbooking();
                                              catch(SQLException e)
                                                      displaySQLErrors(e);
                                              }
                                      }
                              });
               });
               delete2.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent aevt)
                              JB_delete=new JButton("Delete");
                              JTF_Booking_id.setText(null);
                              JTF_Toname.setText(null);
                              JTF Weight.setText(null);
                              JTF Toaddress.setText(null);
                              JTF_Branch_id.setText(null);
                              pn.removeAll();
                              jframe.invalidate();
                              iframe.validate();
                              jframe.repaint();
                              pn1=new JPanel();
                              pn1.setLayout(new GridLayout(10,10));
                              pn1.add(JL_Booking_id);
                              pn1.add(JTF Booking id);
                              pn1.add(JL_Toname);
                              pn1.add(JTF_Toname);
                              pn1.add(JL Weight);
                              pn1.add(JTF_Weight);
                              pn1.add(JL_Toaddress);
                              pn1.add(JTF_Toaddress);
                              pn1.add(JL_Branch_id);
                              pn1.add(JTF_Branch_id);
                              pn3=new JPanel(new FlowLayout());
                              pn3.add(JB delete);
                              pn1.setBounds(115,80,300,250);
                              pn3.setBounds(200,350,75,35);
                              pn2=new JPanel(new FlowLayout());
                              BookingList=new List(10);
                               loadbooking();
                              pn2.add(BookingList);
                              pn2.setBounds(200,350,300,200);
                              pn.add(pn1);
                              pn.add(pn3);
 1602-19-737-066
                              pn.add(pn2);
 M Amruth Sai
```

```
Student Assignments
                               pn.setLayout(new BorderLayout());
                               iframe.add(pn);
                               jframe.setSize(800,800);
                               iframe.validate();
                               BookingList.addItemListener(new ItemListener() {
                                      public void itemStateChanged(ItemEvent ievt)
                                                      rs=stmt.executeQuery("select * from Booking");
                                                      while (rs.next())
                                                              if
(rs.getString("Bid").equals(BookingList.getSelectedItem()))
                                                              break;
                                                      if (!rs.isAfterLast())
                                                              JTF_Booking_id.setText(rs.getString("Bid"));
                                                              JTF_Toname.setText(rs.getString("ToName"));
                                                              JTF Weight.setText(rs.getString("weight"));
                                                              JTF Toaddress.setText(rs.getString("ToAddress"));
                                                              JTF_Branch_id.setText(rs.getString("Id"));
                                              catch (SQLException selectException)
                                                      displaySQLErrors(selectException);
                               JB delete.addActionListener(new ActionListener() {
                                       @Override
                                      public void actionPerformed(ActionEvent aevt)
                                               try
                                                      int a=JOptionPane.showConfirmDialog(pn,"Are you sure
want to Delete:");
                                                      if(a==JOptionPane.YES_OPTION)
                                                              //String query="DELETE FROM employee WHERE
employee_id="+employeeList.getSelectedItem();
                                                              String query="DELETE FROM Booking WHERE
Bid="+JTF_Booking_id.getText();
                                                              int i=stmt.executeUpdate(query);
                                                              JOptionPane.showMessageDialog(pn,"\nDeleted
"+i+" rows succesfully");
                                                              loadbooking();
                                              catch(SQLException e)
                                                      displaySQLErrors(e);
 1602-19-737-066
                                      }
 M Amruth Sai
```

});

```
});
              view2.addActionListener(new ActionListener() {
                      @Override
                      public void actionPerformed(ActionEvent aevt)
                              pn.removeAll();
                              jframe.invalidate();
                              jframe.validate();
                              jframe.repaint();
                              JLabel view=new JLabel("Booking View");
                              JB view=new JButton("View");
                              Font myFont = new Font("Serif",Font.BOLD,25);
                              p2.setBackground(Color.cyan);
                      //
                              view.setFont((myFont));
                              pn1=new JPanel();
                              pn2=new JPanel();
                              pn1.add(view);
                              pn2.add(JB_view);
                              pn1.setBackground(Color.cyan);
                              pn2.setBackground(Color.cyan);
                              pn.add(pn1);
                              pn.add(pn2);
                              pn.setBounds(500,800,300,300);
                              pn.setLayout(new FlowLayout());
                      //
                              pn.setBackground(Color.cyan);
                              iframe.add(pn);
                              jframe.setSize(800,800);
                              jframe.validate();
                              JB view.addActionListener(new ActionListener() {
                                      @Override
                                     public void actionPerformed(ActionEvent aevt)
                                             JFrame if=new JFrame("Booking Details");
                                             JTable jt;
                                             DefaultTableModel model = new DefaultTableModel();
                                  jt = new JTable(model);
                                   model.addColumn("Booking_id");
                                   model.addColumn("To name");
                                   model.addColumn("Weight");
                                   model.addColumn("To address");
                                   model.addColumn("Branch Id");
                                        try
                                        {
                                                     rs=stmt.executeQuery("select * from booking");
                                                     while(rs.next())
                                                             model.addRow(new Object[]{rs.getString("Bid"),
      rs.getString("ToName"),rs.getString("Weight"),rs.getString("ToAddress")
                                                                             ,rs.getString("Id")});
1602-19-737-066
                                             catch(SQLException e)
M Amruth Sai
```

```
Student Assignments
```

```
{
                                                        displaySQLErrors(e);
                                                jt.setEnabled(false);
                                     jt.setBounds(30, 40, 300, 300);
                                     JScrollPane jsp = new JScrollPane(jt);
                                     if.add(jsp);
                                     if.setSize(800, 400);
                                     jf.setVisible(true);
                                });
                        }
                });
 SHEDULE:
package dbms;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.table.DefaultTableModel;
import java.sql.*;
import java.util.Properties;
public class Schedule
        private JPanel pn,pn1,pn2,pn3;
        private JFrame jframe;
        private JButton JB_insert,JB_modify,JB_view,JB_delete;
        private JLabel JL_Schedule_id,JL_Booking_id,JL_Branch_id,JL_Staff_id;
        private JTextField JTF Schedule id, JTF Booking id, JTF Branch id, JTF Staff id;
        Connection con:
        ResultSet rs:
        Statement stmt:
        private JMenuItem insert4,update4,view4,delete4;
        private List ScheduleList:
       private Choice BookingId, BranchId, StaffId;
        public Schedule(JPanel pn, JFrame jframe, JMenuItem insert4, JMenuItem update4, JMenuItem
view4,JMenuItem delete4)
                try
                        Class.forName("oracle.jdbc.driver.OracleDriver");
                catch (Exception e)
                {
                        System.err.println("Unable to find and load driver");
                        System.exit(1);
                connectDatabase();
                this.jframe=jframe;
                this.insert4=insert4;
                this.update4=update4;
 1602-19-737-this view4=view4;
 M Amruth Sai this delete4=delete4;
```

```
JL Schedule id=new JLabel("Schedule Id:");
               JTF_Schedule_id=new JTextField(10);
               JL_Booking_id=new JLabel("Booking Id:");
    JTF Booking id=new JTextField(10);
    JL_Branch_id=new JLabel("Branch Id:");
    JTF_Branch_id=new JTextField(10);
    JL_Staff_id=new JLabel("Staff Id:");
    JTF_Staff_id=new JTextField(10);
    this.pn=pn;
       public void connectDatabase()
               try
                       Connection con=DriverManager.getConnection(
                       "jdbc:oracle:thin:@localhost:1521:xe","amruth","vasavi");
                       stmt=con.createStatement();
                       stmt.executeUpdate("commit");
               catch (SQLException connectException)
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
       private void displaySQLErrors(SQLException e)
               JOptionPane.showMessageDialog(pn1,"\nSQLException: " + e.getMessage() + "\n"+"SQLState:
e.getSQLState() + "\n"+"VendorError: " + e.getErrorCode() + "\n");
       public void loadBooking()
               try
                       BookingId=new Choice();
                       BookingId.removeAll();
                       rs=stmt.executeQuery("select * from Booking");
                       while(rs.next())
                       {
                               BookingId.add(rs.getString("Bid"));
               catch(SQLException e)
                       displaySQLErrors(e);
       public void loadbranch()
               try
 1602-19-737-066
                       BranchId=new Choice();
 M Amruth Sai
```

```
BranchId.removeAll();
                      rs=stmt.executeQuery("select * from Branch");
                      while(rs.next())
                      {
                               BranchId.add(rs.getString("Id"));
              catch(SQLException e)
                      displaySQLErrors(e);
      public void loadstaff()
              try
                      StaffId=new Choice();
                      StaffId.removeAll();
                      rs=stmt.executeQuery("select * from Staff");
                      while(rs.next())
                               StaffId.add(rs.getString("Sid"));
              catch(SQLException e)
                      displaySQLErrors(e);
      public void loadschedule()
              try
                      ScheduleList=new List();
                      ScheduleList.removeAll();
                      rs=stmt.executeQuery("select * from Schedule");
                      while(rs.next())
                               ScheduleList.add(rs.getString("Shid"));
              catch(SQLException e)
                      displaySQLErrors(e);
      public void buildGUI()
              insert4.addActionListener(new ActionListener() {
                       @Override
                      public void actionPerformed(ActionEvent aevt)
                               JB_insert=new JButton("Insert");
                               JTF_Schedule_id.setText(null);
                               JTF_Booking_id.setText(null);
                               JTF_Branch_id.setText(null);
1602-19-737-066
                               JTF_Staff_id.setText(null);
M Amruth Sai
```

```
Student Assignments
```

```
loadschedule();
                               pn.removeAll();
                               iframe.invalidate();
                               jframe.validate();
                               iframe.repaint();
                               pn1=new JPanel();
                               pn1.setLayout(new GridLayout(10,10));
                               pn1.add(JL_Schedule_id);
                               pn1.add(JTF_Schedule_id);
                               pn1.add(JL_Booking_id);
                               pn1.add(JTF_Booking_id);
                               pn1.add(JL_Branch_id);
                               pn1.add(JTF_Branch_id);
                               pn1.add(JL_Staff_id);
                               pn1.add(JTF_Staff_id);
                               pn3=new JPanel(new FlowLayout());
                               pn3.add(JB_insert);
                               pn1.setBounds(115,80,300,250);
                               pn3.setBounds(200,350,75,35);
                               pn2=new JPanel(new FlowLayout());
                               ScheduleList=new List(10);
                               loadschedule():
                               pn2.add(ScheduleList);
                               pn2.setBounds(200,350,300,180);
                               pn.add(pn1);
                               pn.add(pn3);
                               pn.add(pn2);
                               pn.setLayout(new BorderLayout());
                               iframe.add(pn);
                               iframe.setSize(800,800);
                               jframe.validate();
                               JB_insert.addActionListener(new ActionListener() {
                                       @Override
                                       public void actionPerformed(ActionEvent aevt)
                                              try
                                                      String query= "INSERT INTO Schedule VALUES(" +
JTF_Schedule_id.getText() + ","+JTF_Booking_id.getText()+","
+JTF_Staff_id.getText()+","+JTF_Branch_id.getText()+")";
                                                      int i = stmt.executeUpdate(query);
                                                      JOptionPane.showMessageDialog(pn,"\nInserted "+i+" rows
successfully");
                                                      loadschedule();
                                                      System.out.println("Done");
                                              catch(SQLException e)
                                                      displaySQLErrors(e);
 1602-19-737-066
                                              }
 M Amruth Sai
```

```
}
               });
});
update4.addActionListener(new ActionListener() {
        @Override
        public void actionPerformed(ActionEvent aevt)
               JB_modify=new JButton("Modify");
               JTF Schedule id.setText(null);
               JTF Booking id.setText(null);
               JTF Branch id.setText(null);
               JTF_Staff_id.setText(null);
               pn.removeAll();
               iframe.invalidate();
               jframe.validate();
               iframe.repaint();
               pn1=new JPanel();
               pn1.setLayout(new GridLayout(10,10));
               pn1.add(JL Schedule id);
               pn1.add(JTF_Schedule_id);
               pn1.add(JL_Booking_id);
               pn1.add(JTF_Booking_id);
               pn1.add(JL Branch id);
               pn1.add(JTF_Branch_id);
               pn1.add(JL_Staff_id);
               pn1.add(JTF_Staff_id);
               pn3=new JPanel(new FlowLayout());
               pn3.add(JB_modify);
               pn1.setBounds(115,80,300,250);
               pn3.setBounds(200,350,75,35);
               pn2=new JPanel(new FlowLayout());
               ScheduleList=new List(10);
               loadschedule();
               pn2.add(ScheduleList);
               pn2.setBounds(200,350,300,180);
               pn.add(pn1);
               pn.add(pn3);
               pn.add(pn2);
                pn.setLayout(new BorderLayout());
               iframe.add(pn);
               jframe.setSize(800,800);
               iframe.validate();
                ScheduleList.addItemListener(new ItemListener() {
                       public void itemStateChanged(ItemEvent ievt)
                               try
                                       rs=stmt.executeQuery("select * from Schedule");
                                       while (rs.next())
                                       {
```

```
Student Assignments
(rs.getString("Schedule_id").equals(ScheduleList.getSelectedItem()))
                                                              break:
                                                       if (!rs.isAfterLast())
                                                              JTF_Schedule_id.setText(rs.getString("Shid"));
                                                              JTF_Booking_id.setText(rs.getString("Bid"));
                                                              JTF_Branch_id.setText(rs.getString("Id"));
                                                              JTF_Staff_id.setText(rs.getString("Sid"));
                                               catch (SQLException selectException)
                                                       displaySQLErrors(selectException);
                               });
                               JB_modify.addActionListener(new ActionListener() {
                                       @Override
                                       public void actionPerformed(ActionEvent aevt)
                                               try
                                                       int a=JOptionPane.showConfirmDialog(pn,"Are you sure
want to update:");
                                                       if(a==JOptionPane.YES_OPTION)
                                                              String pack=JOptionPane.showInputDialog(pn,"Enter
New:");
                                                              JTF_Schedule_id.setText(pack);
                                                              String query="update Schedule set
insurance_type=""+pack+"" where insurance_num="+JTF_insurance_num.getText();
                                                              int i=stmt.executeUpdate(query);
                                                              JOptionPane.showMessageDialog(pn,"\nUpdated
"+i+" rows succesfully");
                                                              loadinsurance();
                                               catch(SQLException e)
                                                       displaySQLErrors(e);
                                       }
                               });
               }); */
               delete4.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent aevt)
                               JB_delete=new JButton("Delete");
                               JTF_Schedule_id.setText(null);
                               JTF Booking id.setText(null);
                               JTF_Branch_id.setText(null);
                               JTF_Staff_id.setText(null);
 1602-19-737-066
 M Amruth Sai
```

```
pn.removeAll();
                               iframe.invalidate();
                               jframe.validate();
                               iframe.repaint();
                               pn1=new JPanel();
                               pn1.setLayout(new GridLayout(10,10));
                               pn1.add(JL_Schedule_id);
                               pn1.add(JTF_Schedule_id);
                               pn1.add(JL Booking id);
                               pn1.add(JTF Booking id);
                               pn1.add(JL_Branch_id);
                               pn1.add(JTF_Branch_id);
                               pn1.add(JL_Staff_id);
                               pn1.add(JTF_Staff_id);
                               pn3=new JPanel(new FlowLayout());
                               pn3.add(JB_delete);
                               pn1.setBounds(115,80,300,250);
                               pn3.setBounds(200,350,75,35);
                               pn2=new JPanel(new FlowLayout());
                               ScheduleList=new List(10):
                               loadschedule();
                               pn2.add(ScheduleList);
                               pn2.setBounds(200,350,300,200);
                               pn.add(pn1);
                               pn.add(pn3);
                               pn.add(pn2);
                               pn.setLayout(new BorderLayout());
                               iframe.add(pn);
                               iframe.setSize(800,800);
                               jframe.validate();
                               ScheduleList.addItemListener(new ItemListener() {
                                       public void itemStateChanged(ItemEvent ievt)
                                               try
                                               {
                                                       rs=stmt.executeQuery("select * from Schedule");
                                                       while (rs.next())
                                                               if
(rs.getString("Shid").equals(ScheduleList.getSelectedItem()))
                                                                break;
                                                       if (!rs.isAfterLast())
                                                               JTF_Schedule_id.setText(rs.getString("Shid"));
                                                               JTF_Booking_id.setText(rs.getString("Bid"));
                                                               JTF Branch id.setText(rs.getString("Id"));
                                                               JTF_Staff_id.setText(rs.getString("Sid"));
 1602-19-737-066
```

```
Student Assignments
                                              catch (SQLException selectException)
                                                     displaySQLErrors(selectException);
                              JB_delete.addActionListener(new ActionListener() {
                                      @Override
                                      public void actionPerformed(ActionEvent aevt)
                                              try
                                                     int a=JOptionPane.showConfirmDialog(pn,"Are you sure
want to Delete:");
                                                     if(a==JOptionPane.YES_OPTION)
                                                             //String query="DELETE FROM insurance WHERE
insurance_num="+insuranceList.getSelectedItem();
                                                             String query="DELETE FROM Schedule WHERE
Shid="+JTF_Schedule_id.getText();
                                                             int i=stmt.executeUpdate(query);
                                                             JOptionPane.showMessageDialog(pn,"\nDeleted
"+i+" rows succesfully");
                                                             loadschedule();
                                                     }
                                              catch(SQLException e)
                                                     displaySQLErrors(e);
                                      }
                              });
               });
               view4.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent aevt)
                              pn.removeAll();
                              jframe.invalidate();
                              iframe.validate();
                              jframe.repaint();
                              JLabel view=new JLabel("Schedule View");
                              JB_view=new JButton("View");
                              Font myFont = new Font("Serif",Font.BOLD,25);
                              view.setFont((myFont));
                              pn1=new JPanel();
                              pn2=new JPanel();
                              pn1.add(view);
                              pn2.add(JB_view);
                              pn1.setBackground(Color.cyan);
                              pn2.setBackground(Color.cyan);
                              pn.add(pn1);
 1602-19-737-066
                              pn.add(pn2);
 M Amruth Sai
```

```
pn.setBounds(500,800,300,300);
                        pn.setLayout(new FlowLayout());
                        iframe.add(pn);
                        iframe.setSize(800,800);
                        jframe.validate();
                        JB_view.addActionListener(new ActionListener() {
                                @Override
                                public void actionPerformed(ActionEvent aevt)
                                        JFrame jf=new JFrame("Schedule Details");
                                        JTable it:
                                        DefaultTableModel model = new DefaultTableModel();
                            jt = new JTable(model);
                             model.addColumn("Schedule Id");
                             model.addColumn("Booking Id");
                             model.addColumn("Branch Id");
                             model.addColumn("Staff Id");
                                  try
                                  {
                                                rs=stmt.executeQuery("select * from Schedule");
                                                while(rs.next())
                                                {
                                                        model.addRow(new Object[]{rs.getString("Shid"),
rs.getString("Shid"),rs.getString("Bid"),rs.getString("id"),rs.getString("sid")});
                                        catch(SQLException e)
                                  {
                                                displaySQLErrors(e);
                                        jt.setEnabled(false);
                             it.setBounds(30, 40, 300, 300);
                             JScrollPane jsp = new JScrollPane(jt);
                            jf.add(jsp);
                            if.setSize(800, 400);
                            jf.setVisible(true);
                                }
                        });
                 }
          });
    }
```

}

DELIVERY:

```
package dbms;
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.table.DefaultTableModel;
import java.sql.*;
import java.util.Properties;
import java.util.StringTokenizer;
public class Delivery
        private JPanel pn,pn1,pn2,pn3;
        private JFrame jframe;
        private JButton JB_insert,JB_modify,JB_view,JB_delete;
        private JLabel JL_Did,JL_Selection,JL_Bid;
        private JTextField JTF Did,JTF Bid,JTF Selection;
        Connection con:
        ResultSet rs;
        Statement stmt;
        private JMenuItem insert3,update3,view3,delete3;
        private List hotelsList;
        private Choice stateId, hoteIId;
        public Delivery(JPanel pn, JFrame jframe, JMenuItem insert3, JMenuItem update3, JMenuItem
view3,JMenuItem delete3)
       {
               try
                        Class.forName("oracle.jdbc.driver.OracleDriver");
               catch (Exception e)
                        System.err.println("Unable to find and load driver");
                        System.exit(1);
                connectDatabase();
               this.jframe=jframe;
                this.insert3=insert3;
                this.update3=update3;
               this.view3=view3;
                this.delete3=delete3:
                JL_Bid=new JLabel("Bld:");
               JTF_Bid=new JTextField(10);
               JL_Did=new JLabel("DId:");
               JTF_Did=new JTextField(10);
               JL Selection=new JLabel("Selection:");
     JTF Selection=new JTextField(10);
     JL noOfRooms=new JLabel("No Of Rooms:");
     JTF_noOfRooms=new JTextField(10);
     this.pn=pn;
       public void connectDatabase()
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
        {
               try
                        Connection con=DriverManager.getConnection(
                        "jdbc:oracle:thin:@localhost:1521:xe","amruth","vasavi");
                        stmt=con.createStatement();
                        stmt.executeUpdate("commit");
                catch (SQLException connectException)
                 System.out.println(connectException.getMessage());
                 System.out.println(connectException.getSQLState());
                 System.out.println(connectException.getErrorCode());
                 System.exit(1);
        private void displaySQLErrors(SQLException e)
                JOptionPane.showMessageDialog(pn1,"\nSQLException: " + e.getMessage() + "\n"+"SQLState:
e.getSQLState() + "\n"+"VendorError: " + e.getErrorCode() + "\n");
        public void loadStatesHotels()
               try
                {
                        hotelsList=new List();
                        hotelsList.removeAll();
                        rs=stmt.executeQuery("select * from Delivery");
                        while(rs.next())
                        //
                                hotelsList.add(rs.getString("Did")+"->"+rs.getString("Bid"));
                                hotelsList.add(rs.getString("Did"));
               catch(SQLException e)
                        displaySQLErrors(e);
        public void loadStates()
               try
                        stateId=new Choice();
                        stateId.removeAll();
                        rs=stmt.executeQuery("select * from Booking");
                        while(rs.next())
                                stateId.add(rs.getString("Bid"));
                catch(SQLException e)
                        displaySQLErrors(e);
 1602-19-737-066
 M Amruth Sai
```

```
public void loadHotels()
              try
                      hotelId=new Choice();
                      hotelld.removeAll();
                      rs=stmt.executeQuery("select * from Delivery");
                      while(rs.next())
                      {
                              hotelld.add(rs.getString("Did"));
              catch(SQLException e)
                      displaySQLErrors(e);
      public void buildGUI()
              insert3.addActionListener(new ActionListener() {
                      @Override
                      public void actionPerformed(ActionEvent aevt)
                              JB_insert=new JButton("Insert");
                              JTF_Did.setText(null);
                              JTF Bid.setText(null);
                              JTF_Selection.setText(null);
      //
                              JTF_noOfRooms.setText(null);
                              loadStates();
                              loadHotels();
                              pn.removeAll();
                              iframe.invalidate();
                              jframe.validate();
                              jframe.repaint();
                              pn1=new JPanel();
                              pn1.setLayout(new GridLayout(10,10));
                              pn1.add(JL_Did);
                              pn1.add(JTF_Did);
                              pn1.add(JL_Bid);
                              pn1.add(JTF Bid);
              //
                              pn1.add(JL_Did);
                      //
                              pn1.add(JTF Did);
                              pn1.add(JL_Selection);
                              pn1.add(JTF_Selection);
      //
                              pn1.add(JL noOfRooms);
      //
                              pn1.add(JTF_noOfRooms);
                              pn3=new JPanel(new FlowLayout());
                              pn3.add(JB_insert);
                              pn1.setBounds(115,80,300,250);
                              pn3.setBounds(200,350,75,35);
                              pn2=new JPanel(new FlowLayout());
1602-19-737-066
```

```
Student Assignments
                               hotelsList=new List(10);
                               loadStatesHotels();
                               pn2.add(hotelsList);
                               pn2.setBounds(200,350,300,180);
                               pn.add(pn1);
                               pn.add(pn3);
                               pn.add(pn2);
                               //hotelsList.setEnabled(false);
                               pn.setLayout(new BorderLayout());
                               jframe.add(pn);
                               iframe.setSize(800,800);
                               jframe.validate();
                                JB insert.addActionListener(new ActionListener() {
                                        @Override
                                       public void actionPerformed(ActionEvent aevt)
                                               try
                                               {
                                                       String query= "INSERT INTO Delivery VALUES("+
JTF_Did.getText() + ","+JTF_Bid.getText() +","+ JTF_Selection.getText() +"")";
                                                       int i = stmt.executeUpdate(query);
                                                       JOptionPane.showMessageDialog(pn,"\nInserted "+i+" rows
successfully");
                                                       loadStatesHotels();
                                                       System.out.println("Done");
                                               catch(SQLException e)
                                                       displaySQLErrors(e);
                                               }
                                       }
                               });
               update3.addActionListener(new ActionListener() {
                        @Override
                       public void actionPerformed(ActionEvent aevt)
                               JB_modify=new JButton("Modify");
                               JTF_Bid.setText(null);
                               JTF_Did.setText(null);
                               JTF_Selection.setText(null);
//
                               JTF noOfRooms.setText(null);
                                pn.removeAll();
                               jframe.invalidate();
                               jframe.validate();
                               jframe.repaint();
                               pn1=new JPanel();
                               pn1.setLayout(new GridLayout(10,10));
                               pn1.add(JL Bid);
                               pn1.add(JTF_Bid);
                               pn1.add(JL_Did);
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                pn1.add(JTF Did);
                                pn1.add(JL_Selection);
                               pn1.add(JTF_Selection);
//
                               pn1.add(JL noOfRooms);
//
                               pn1.add(JTF_noOfRooms);
                                pn3=new JPanel(new FlowLayout());
                               pn3.add(JB_modify);
                               pn1.setBounds(115,80,300,250);
                               pn3.setBounds(200,350,75,35);
                                pn2=new JPanel(new FlowLayout());
                                hotelsList=new List(10);
                               loadStatesHotels();
                               pn2.add(hotelsList);
                               pn2.setBounds(250,350,300,180);
                                pn.add(pn1);
                               pn.add(pn3);
                               pn.add(pn2);
                               pn.setLayout(new BorderLayout());
                               iframe.add(pn);
                               iframe.setSize(800,800);
                               jframe.validate();
                               hotelsList.addItemListener(new ItemListener() {
                                        @Override
                                       public void itemStateChanged(ItemEvent ievt)
                                               try
                                               {
                                                       rs=stmt.executeQuery("select * from Delivery");
                                                       while (rs.next())
                                                               if
(rs.getString("Did").equals(hotelsList.getSelectedItem()))
                                                                       break;
                                                       if (!rs.isAfterLast())
                                                               JTF_Did.setText(rs.getString("Did"));
                                                               JTF_Selection.setText(rs.getString("Selection"));
        JTF_noOfRooms.setText(rs.getString("no_Of_Rooms_Available"));
                                                               JTF Bid.setText(rs.getString("Bid"));
                                                       }
                                               }
                                               catch (SQLException selectException)
                                                       displaySQLErrors(selectException);
                                               }
                               JB modify.addActionListener(new ActionListener() {
                                        @Override
                                       public void actionPerformed(ActionEvent aevt)
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                              try
                                                      int a=JOptionPane.showConfirmDialog(pn1,"Are you sure do
you want to update:");
                                                      if(a==JOptionPane.YES_OPTION)
                                                              String
rooms=JOptionPane.showInputDialog(pn,"Enter selection:");
                                                              JTF Selection.setText(rooms);
                                                              String query="update Delivery set
selection=""+rooms+
                                                                              "' where Did="+JTF Did.getText();
                                                              int i=stmt.executeUpdate(query);
                                                              JOptionPane.showMessageDialog(pn,"\nUpdated
"+i+" rows successfully");
                                                              loadStatesHotels();
                                              catch(SQLException exp)
                                                      displaySQLErrors(exp);
                                              }
                                       }
                               });
                       }
               });
               delete3.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent aevt)
                               JB_delete=new JButton("Delete");
                               JTF_Bid.setText(null);
                               JTF Did.setText(null);
                               JTF Selection.setText(null);
//
                               JTF_noOfRooms.setText(null);
                               pn.removeAll();
                               jframe.invalidate();
                               jframe.validate();
                               iframe.repaint();
                               pn1=new JPanel();
                               pn1.setLayout(new GridLayout(10,10));
                               pn1.add(JL_Bid);
                               pn1.add(JTF Bid);
                               pn1.add(JL_Did);
                               pn1.add(JTF_Did);
                               pn1.add(JL_Selection);
                               pn1.add(JTF_Selection);
//
                               pn1.add(JL_noOfRooms);
                               pn1.add(JTF noOfRooms);
                               pn3=new JPanel(new FlowLayout());
                               pn3.add(JB_delete);
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                pn1.setBounds(115,80,300,250);
                                pn3.setBounds(180,350,75,35);
                                pn2=new JPanel(new FlowLayout());
                                hotelsList=new List(10);
                                loadStatesHotels();
                                pn2.add(hotelsList);
                                pn2.setBounds(250,350,300,180);
                                pn.add(pn1);
                                pn.add(pn3);
                                pn.add(pn2);
                                pn.setLayout(new BorderLayout());
                                iframe.add(pn);
                                iframe.setSize(800,800);
                                jframe.validate();
                                hotelsList.addItemListener(new ItemListener() {
                                        @Override
                                        public void itemStateChanged(ItemEvent e)
                                                try
                                                {
                                                        rs=stmt.executeQuery("select * from Delivery");
                                                        StringTokenizer st=new
StringTokenizer(hotelsList.getSelectedItem());
                                                        //String p=st.nextToken();
                                                        String q=st.nextToken();
                                                        while (rs.next())
                                                                //if (rs.getString("state_Id").equals(p) &&
rs.getString("hotel Id").equals(q))
                                                                if (rs.getString("Did").equals(q))
                                                                 break;
                                                        if (!rs.isAfterLast())
                                                                JTF_Did.setText(rs.getString("Did"));
                                                                JTF_Selection.setText(rs.getString("Selection"));
        JTF noOfRooms.setText(rs.getString("no Of Rooms Available"));
                                                                JTF_Bid.setText(rs.getString("Bid"));
                                                }
                                                catch (SQLException selectException)
                                                                displaySQLErrors(selectException);
                               });
                                JB delete.addActionListener(new ActionListener() {
                                        @Override
                                        public void actionPerformed(ActionEvent aevt)
 1602-19-737-066
 M Amruth Sai
```

```
Student Assignments
                                               try
                                                      int a=JOptionPane.showConfirmDialog(pn,"Are you sure do
you want to delete:");
                                                      if(a==JOptionPane.YES_OPTION)
                                                               StringTokenizer st=new
StringTokenizer(hotelsList.getSelectedItem(),"->");
                                                               String query="DELETE FROM Delivery WHERE
Did="+st.nextToken();
                                                         int i=stmt.executeUpdate(query);
                                                               JOptionPane.showMessageDialog(pn,"\nDeleted
"+i+" rows successfully");
                                                               loadStatesHotels();
                                                       }
                                               catch(SQLException exp)
                                                       displaySQLErrors(exp);
                                       }
                               });
               view3.addActionListener(new ActionListener() {
                       @Override
                       public void actionPerformed(ActionEvent aevt)
                               pn.removeAll();
                               jframe.invalidate();
                               jframe.validate();
                               jframe.repaint();
                               JB view=new JButton("View");
                               JLabel view=new JLabel("Delivery View");
                               Font myFont = new Font("Serif",Font.BOLD,25);
                               view.setFont((myFont));
                               pn1=new JPanel();
                               pn2=new JPanel();
                               pn1.setBackground(Color.cyan);
                               pn2.setBackground(Color.cyan);
                               pn1.add(view);
                               pn2.add(JB_view);
                               pn.add(pn1);
                               pn.add(pn2);
                               pn.setLayout(new FlowLayout());
                               iframe.add(pn);
                               jframe.setSize(800,800);
                               jframe.validate();
                               JB_view.addActionListener(new ActionListener() {
                                       @Override
                                       public void actionPerformed(ActionEvent aevt)
                                               JFrame jf=new JFrame("Delivery Details");
                                         JTable jt;
```

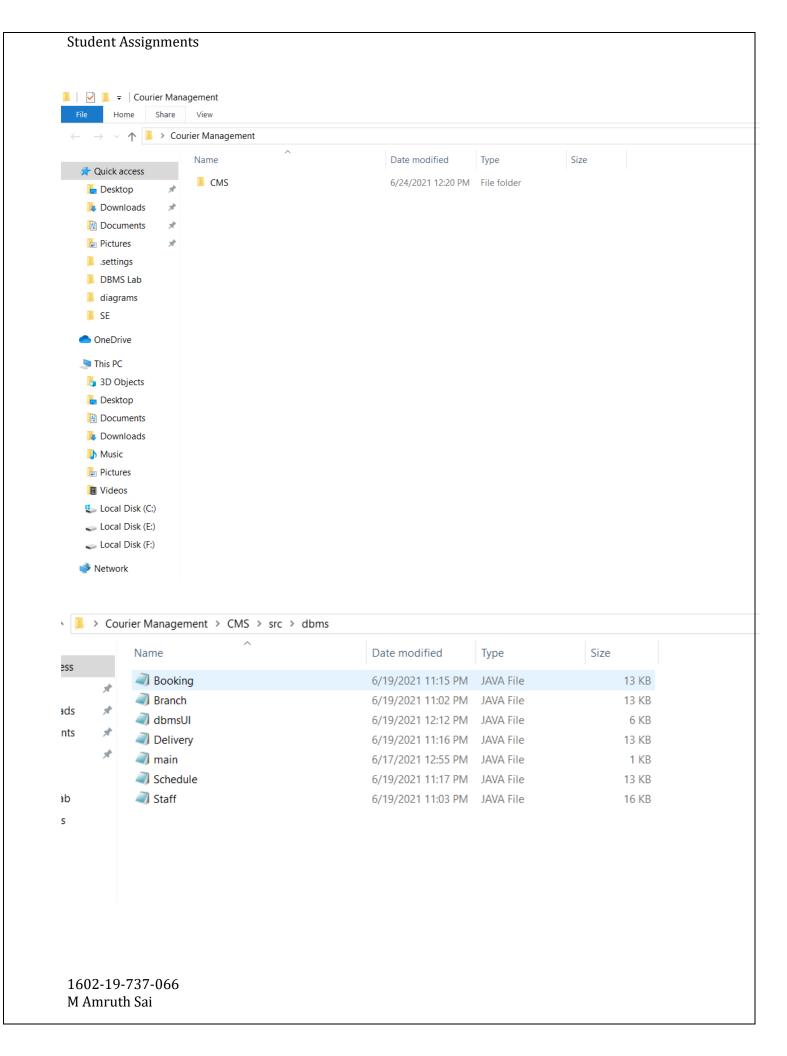
Github links and folder

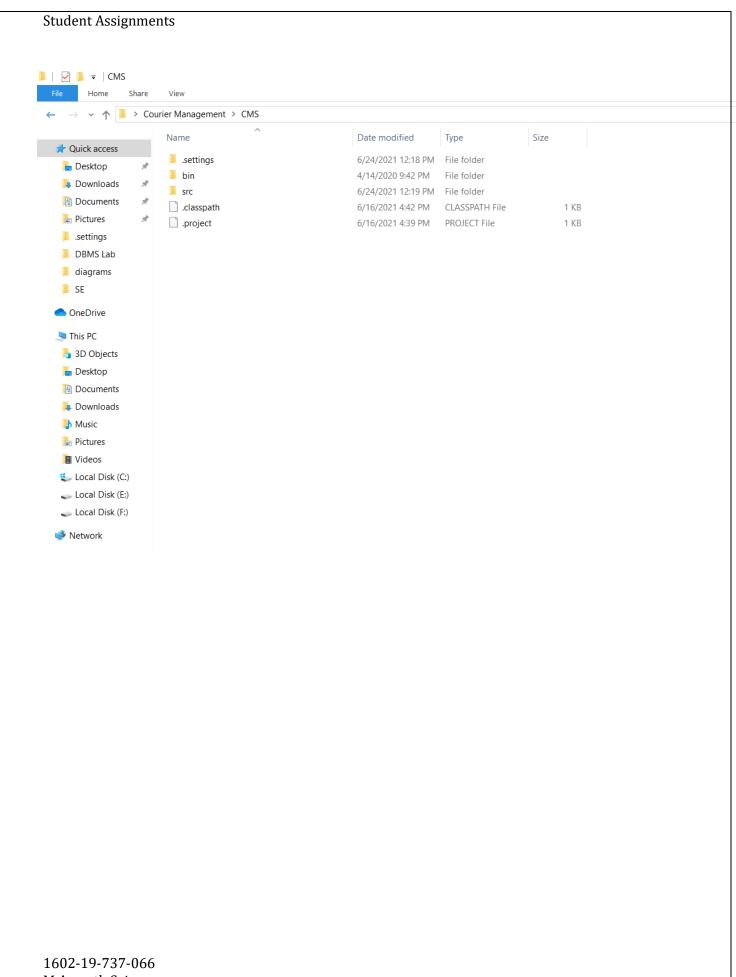
structure: Link:

https://github.com/Amruth066/

DBMS₂

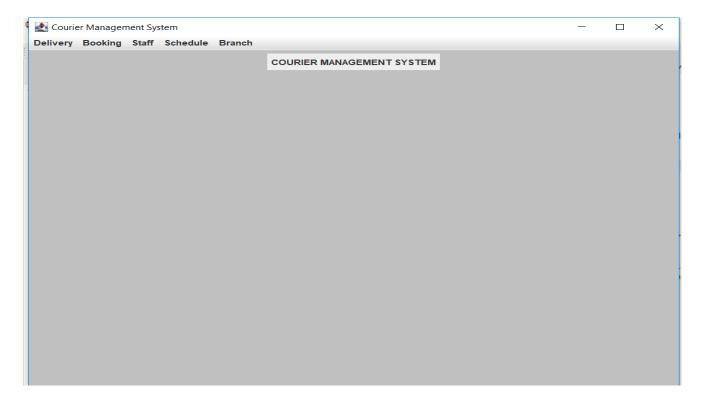
Folder structure:

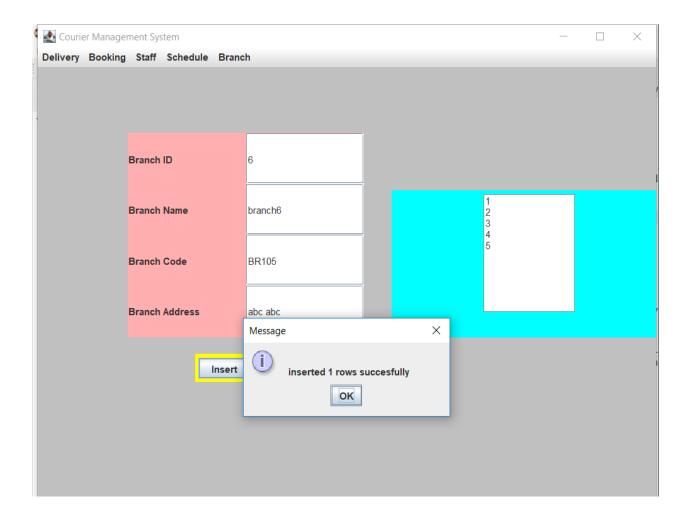


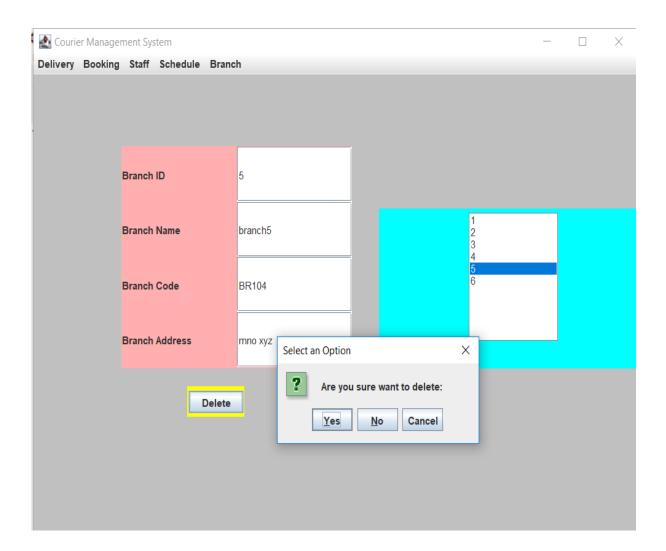


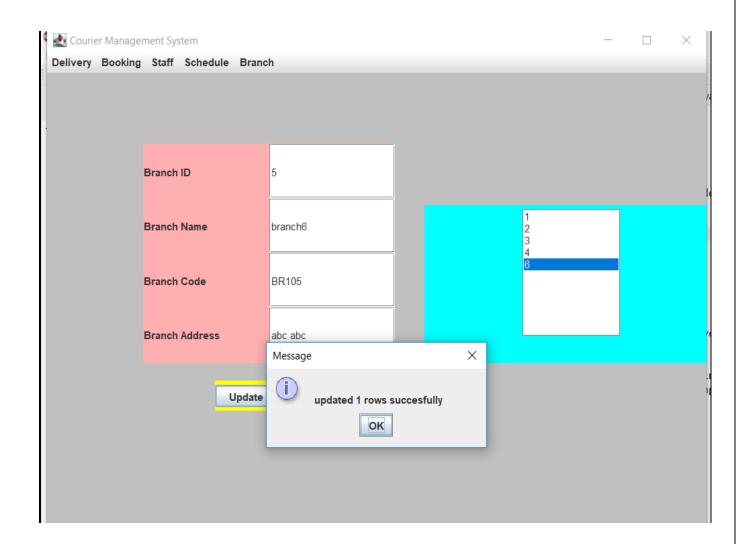
TESTING

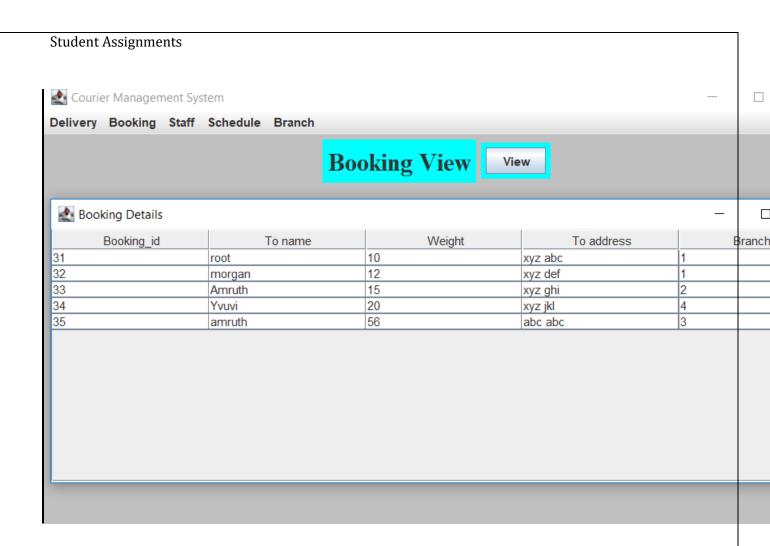
OUTPUT SCREENSHOTS:

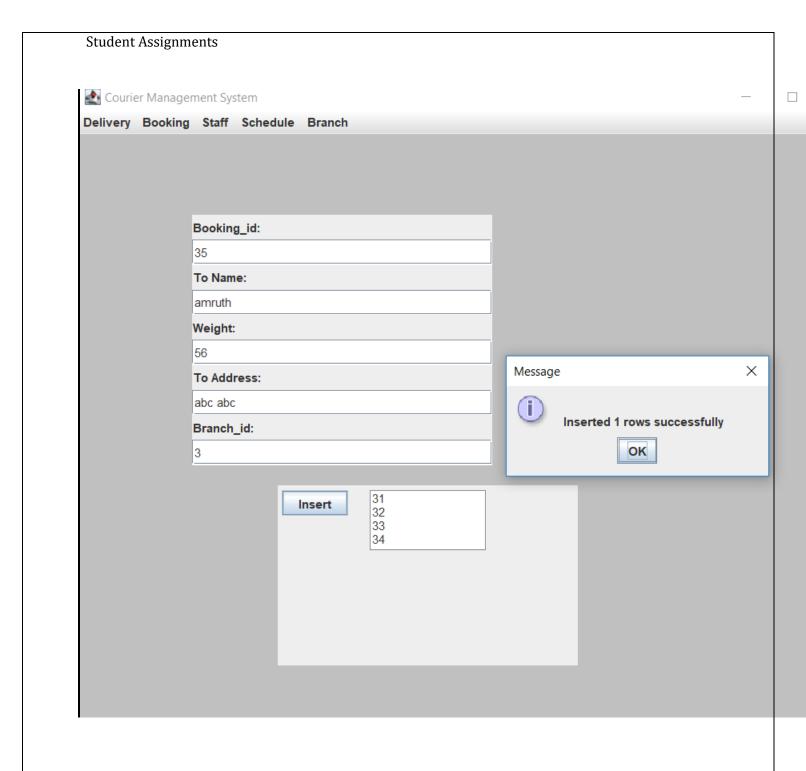


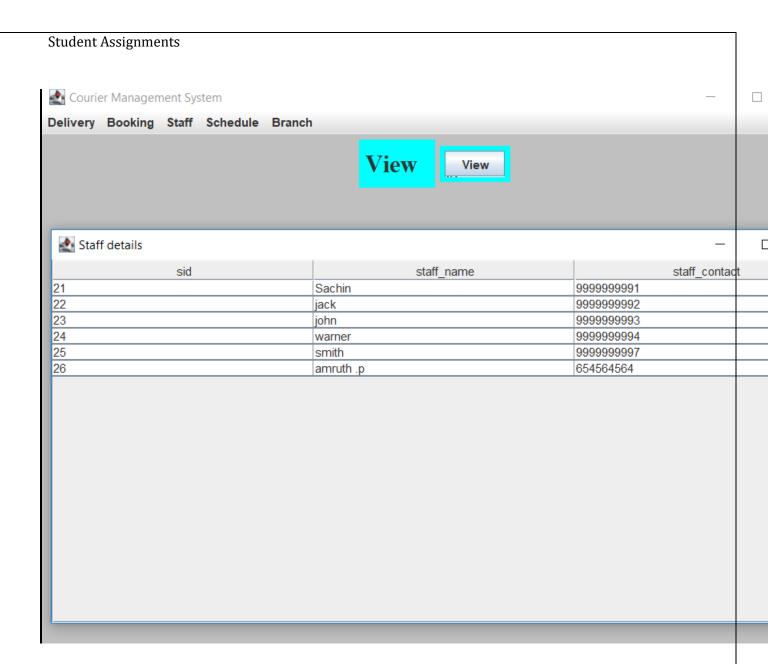


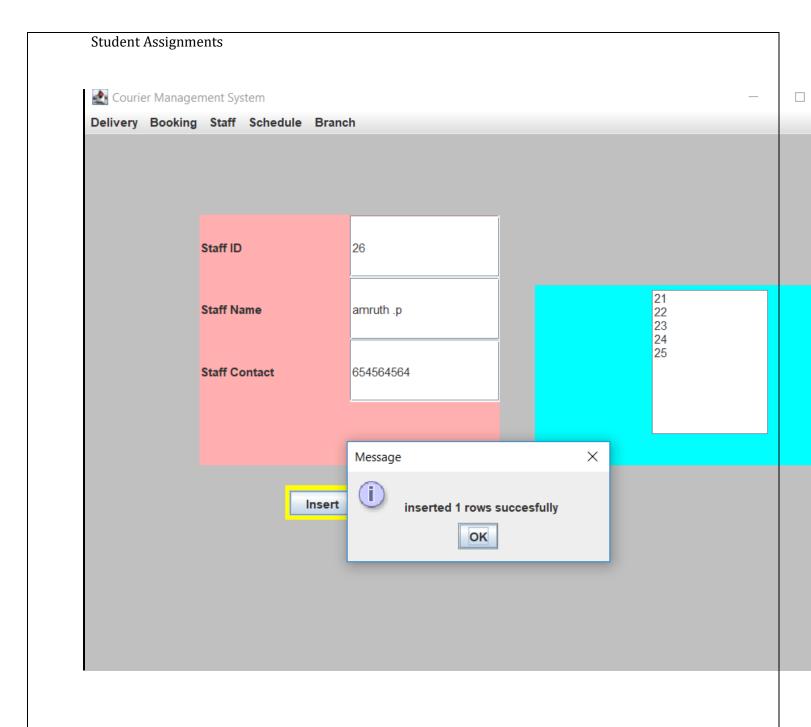


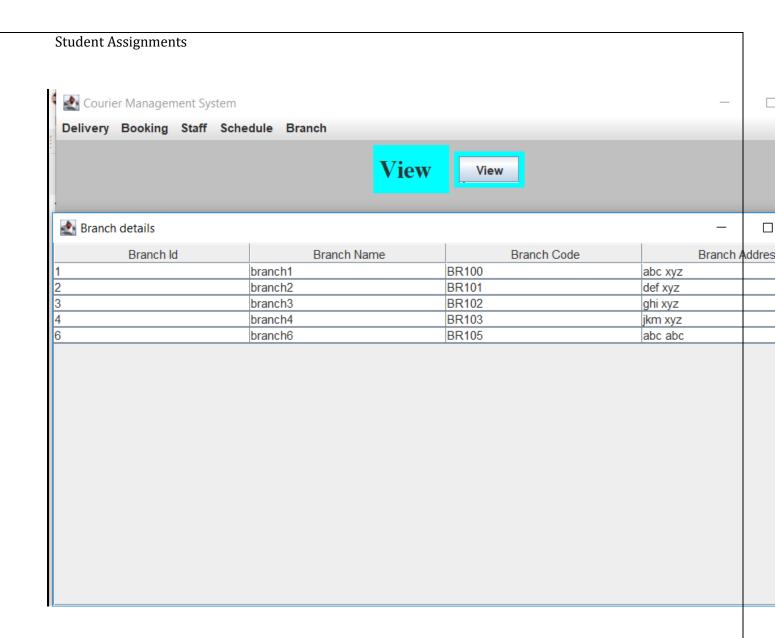


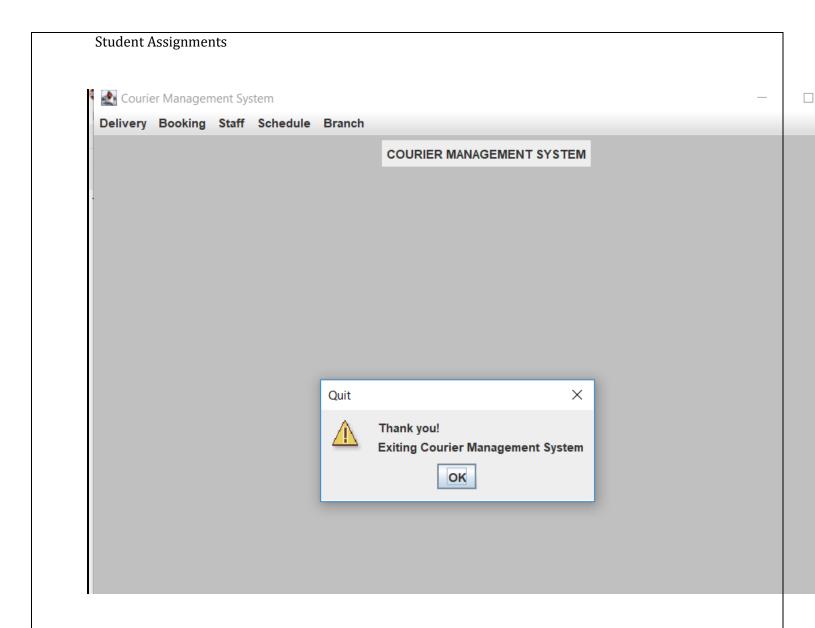


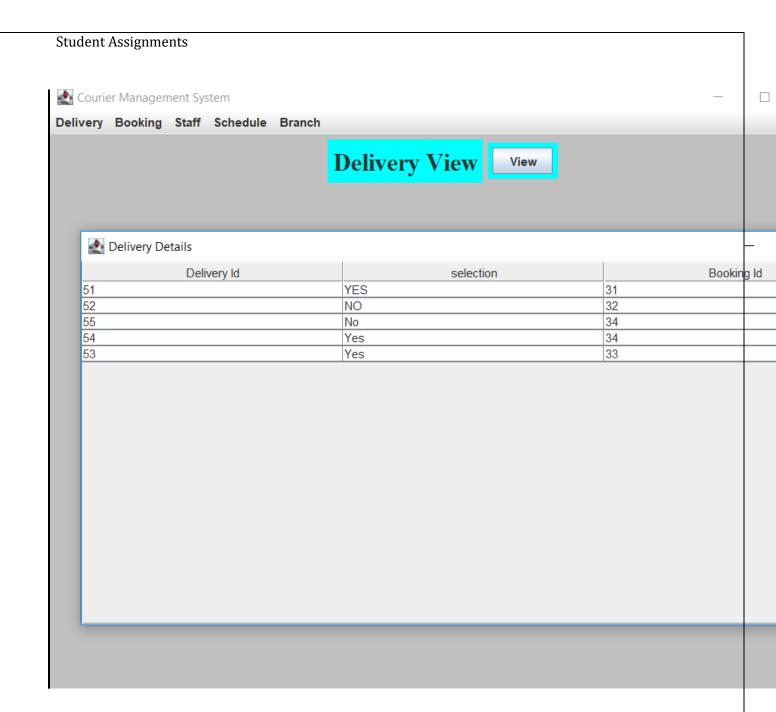


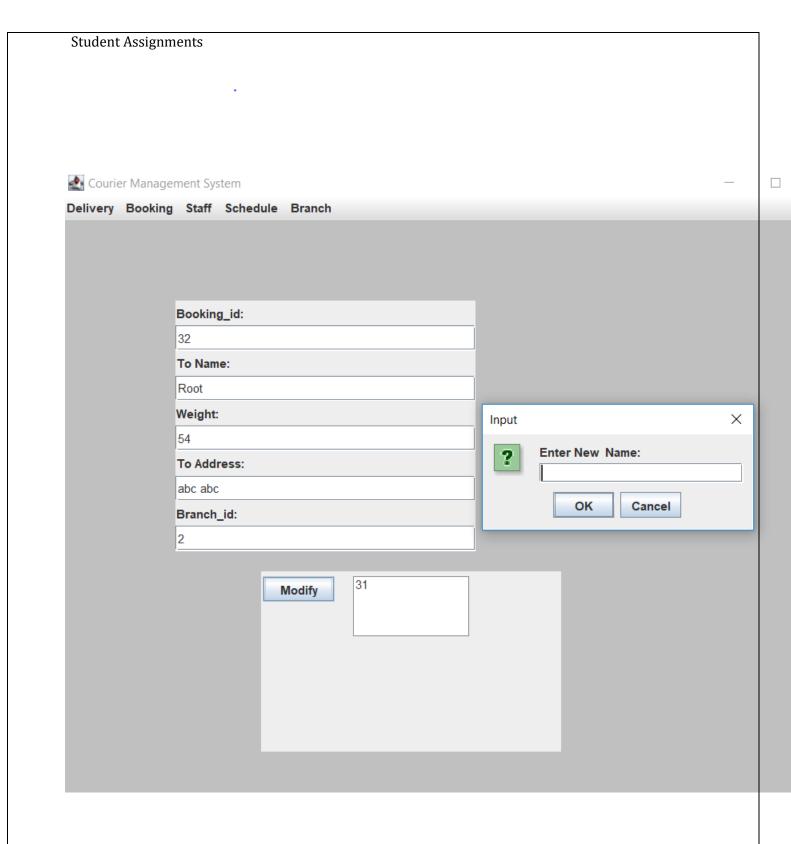


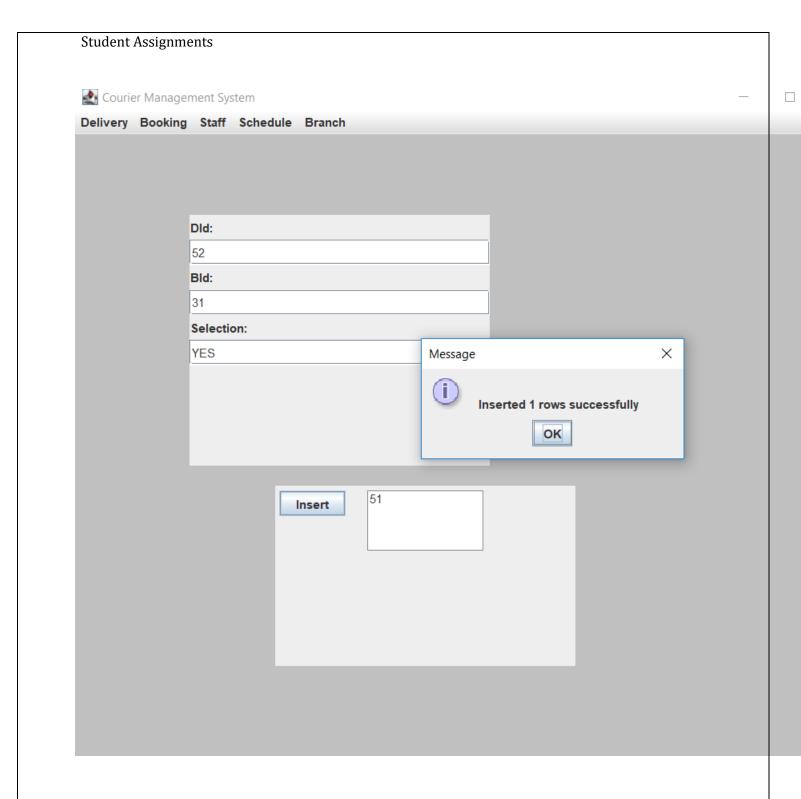


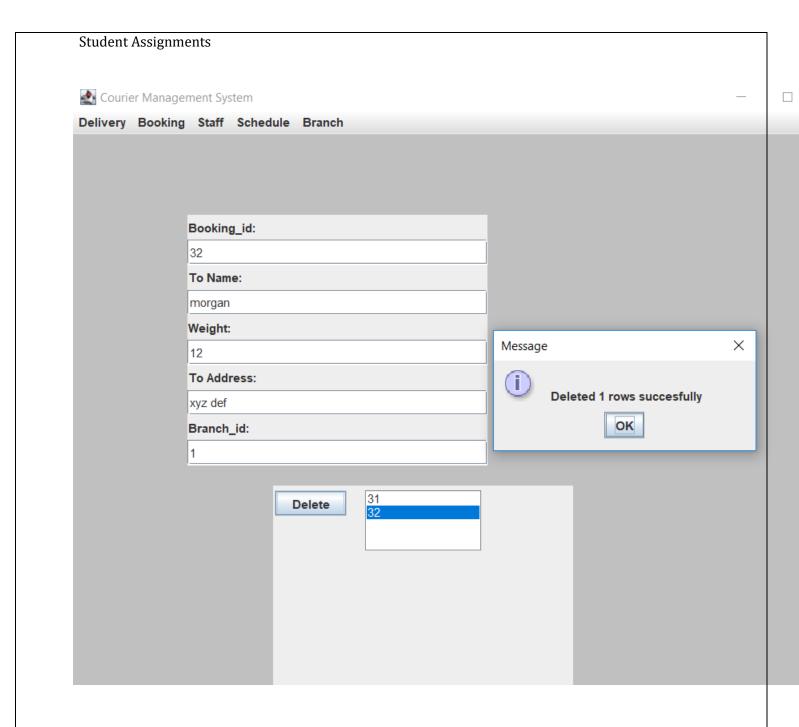


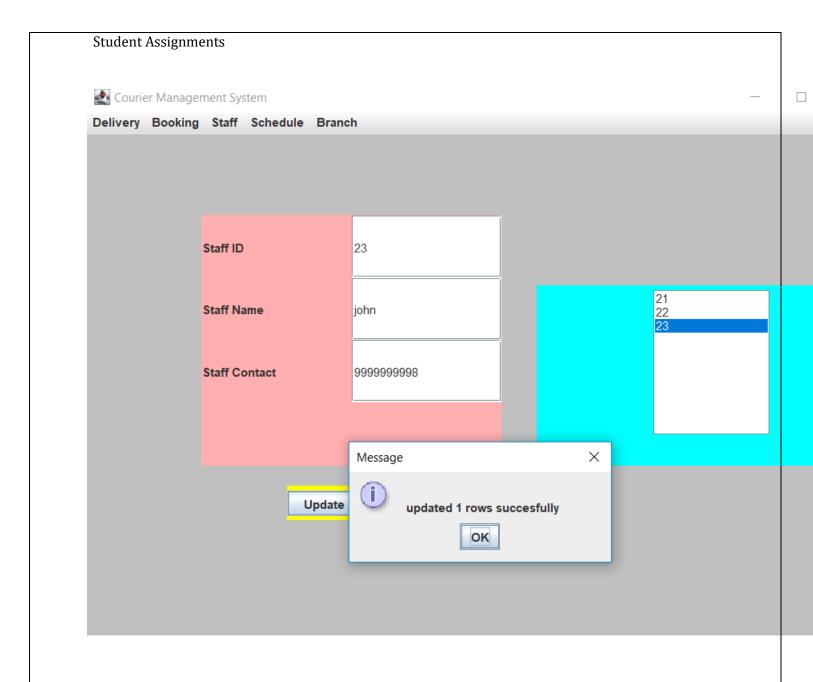


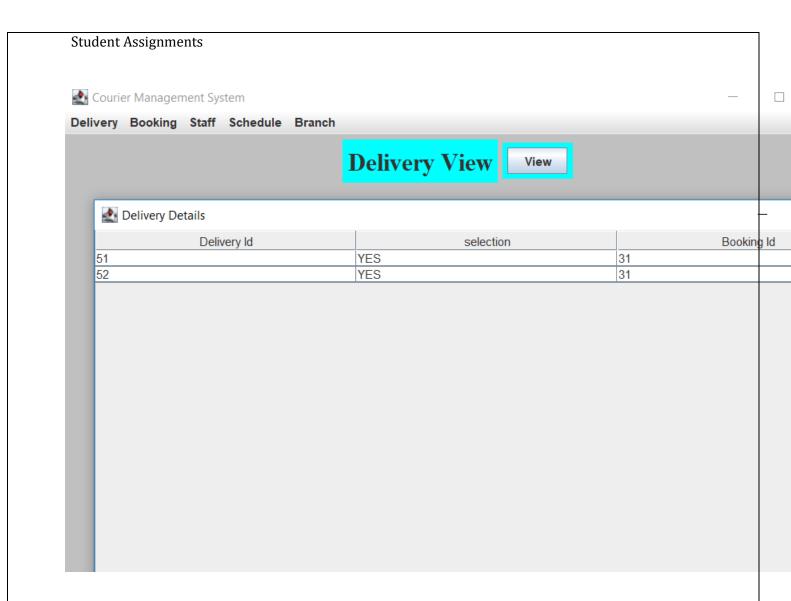


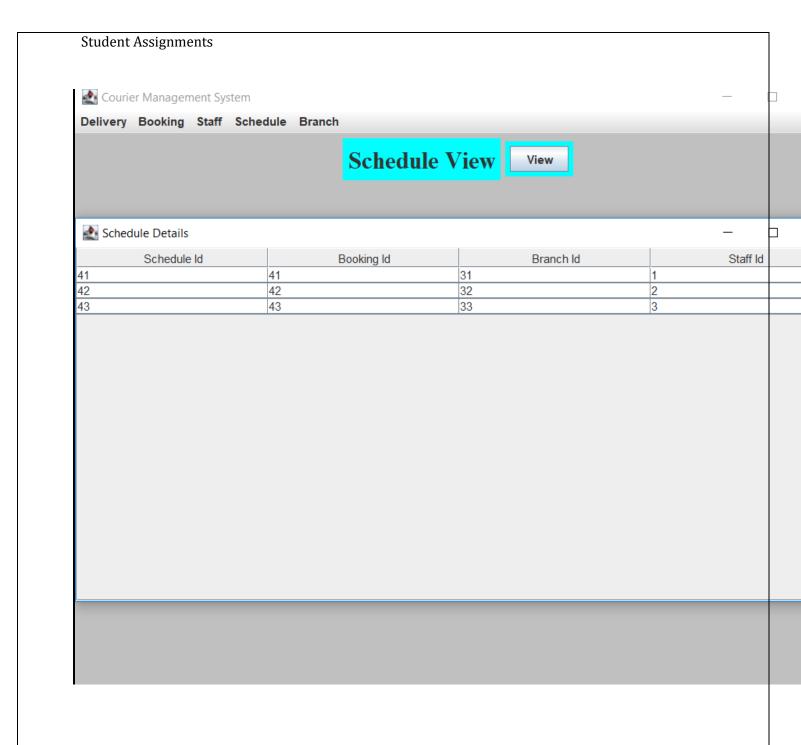












DATABASE OUTPUTS:

BEFORE:

```
SQL> select * from branch;

ID BRANCH_NAME BRANCH_CODE

BRANCH_ADDRESS

1 branch1 BR100

abc xyz
```

```
SQL> select * from staff;

SID STAFF_NAME STAFF_CONTACT

21 Sachin 999999991

22 jack 999999992

23 john 999999993

24 warner 999999994

25 smith 999999997

26 amruth .p 654564564

6 rows selected.
```

```
SQL> select * from Booking;

BID TONAME TOADDRESS WEIGHT ID

31 root xyz abc 10 1
```

Student Assignments

```
SQL> select * from delivery;

DID BID SELECTION

51 31 YES
52 31 YES
```

AFTER:

```
SQL> select * from branch;

ID BRANCH_NAME BRANCH_CODE

BRANCH_ADDRESS

1 branch1 BR100

abc xyz

2 branch2 BR101

abc abc
```

SQL> s	select * from bo	oking; TOADDRESS	WEIGHT	ID
	BID TOWARE		MCIQUI	10
	31 root	xyz abc	10	1
	33 ramesh	ptr ptr	55	1
	32 amruth	pqr pqr	54	2
SQL>				

```
SQL> select * from schedule;
      SHID
                    BID
                                SID
                                             ID
        41
                     31
                                 21
                                              1
        42
                     32
                                 22
        43
                     33
                                 21
                                               2
```

```
SQL> select * from delivery;

DID BID SELECTION

------

51 31 YES

54 31 NO

52 31 YES

53 33 No
```

DISCUSSION AND FUTURE WORK

So far this project has helped us assign assignments to students by staff and students will be able to view assignments their marks, due dates and feedback. In future we try to include an option which allows students to know their mistakes in their assignments and staff can highlight the mistakes by students in their respective submissions.

REFERENCES:

- 1. Abraham Silberschatz, Henry F Korth, S. Sudarshan, Database System Concepts, 6th Edition, McGraw-Hill International Edition, 2010.
- 2. https://docs.oracle.com/cd/E11882_01/server.112/e40540/intro.htm#CNCPT001

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			

Student Assignments			
1000 40 505 000			
1602-19-737-066 M Amruth Sai			