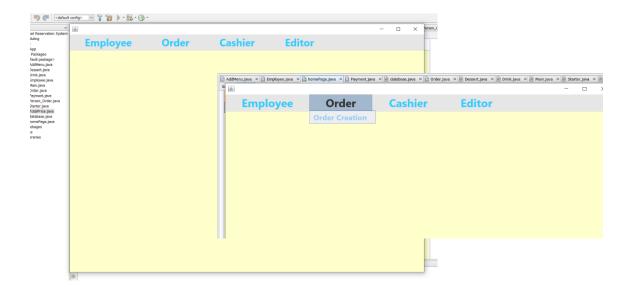
# SOFTWARE ENGINEERING TOOLS REPORT

# RESTAURANT APPLICATION

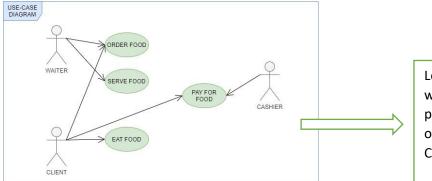
Arife Gül Yalçın B1605.090054

First of all, I want to give information about our purpose in this application and what we want to see. In Restaurant Application;



There are 4 different Menu and Menu Items;

- First, there is the option "Employee" and "AddEmployee" in it.
- ♣ Second, there is the option "Order" and "Order Creation" in it.
- ♣ Third, there is the option "Cashier" and "Payment" in it.
- ♣ Fourth, there is the option "Editor" and "Add Menu" in it.

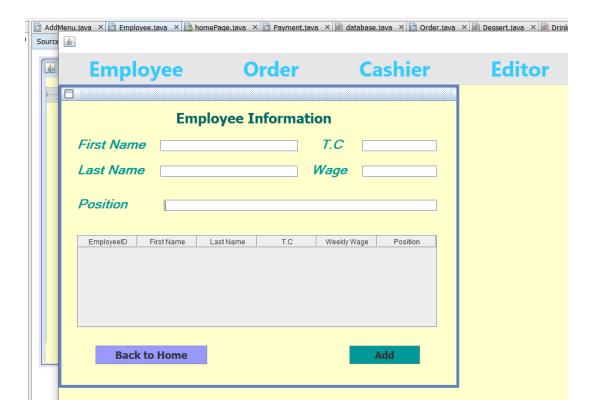


Let's look at our Use-Case diagram that we prepared in the first part of our project. Here, with our 'AddEmployee' option, we can add people like Waiter, Cashier, Manager first.

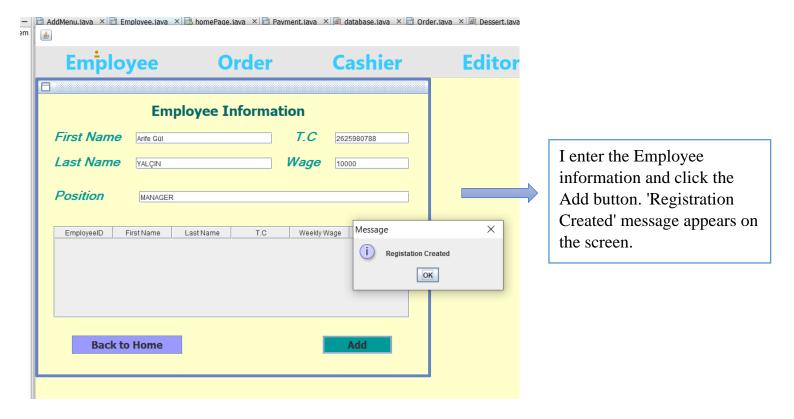
```
@SuppressWarnings("unchecked")
Generated Code
private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Employee emp = new Employee();
    panell.add(emp);
    emp.setVisible(true);
private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    Order o = new Order();
                                                                                     For example, let's see
    panell.add(o);
                                                                                     what happens when you
    o.setVisible(true);
                                                                                     click on Payment. Firstly,
private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
                                                                                     I create a new
    // TODO add your handling code here:
                                                                                     object(Payment). After
     Payment p = new Payment();
     panell.add(p);
                                                                                     that, I add this object to
    p.setVisible(true);
                                                                                     my panel1.(Panel name in
                                                                                     the Home page)
private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
      TODO add your handling code here:
     AddMenu am = new AddMenu();
     panell.add(am);
    am.setVisible(true);
```

In this section, I showed how I have redirected to the pages that will open when I click on Menu Items.

# FRAME 'ADD EMPLOYEE'

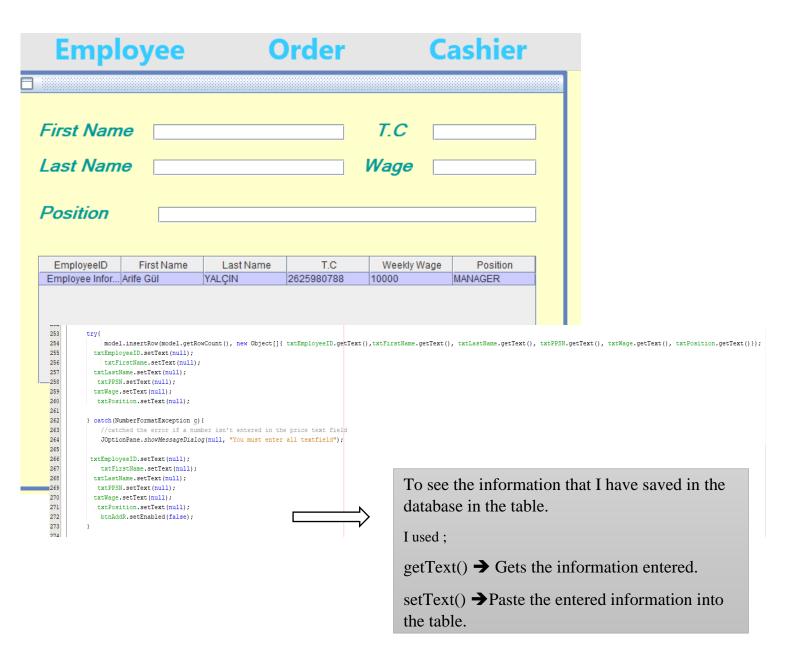


## **How Does the Application Work?**



```
private void btnAddRActionPerformed(java.awt.event.ActionEvent evt) {
         model = (DefaultTableModel) tblEmployees.getModel();
              String EmployeeID = txtEmployeeID.getText();
              String First_Name = txtFirstName.getText();
String Last_Name = txtLastName.getText();
String TC = txtPPSN.getText();
              String Wages = txtWage.getText();
              String Position = txtPosition.getText();
              Class.forName("com.mysql.jdbc.Driver");
              con = DriverManager.getConnection("jdbc:mysql://localhost/restaurant","root","");
pst = con.prepareStatement("insert into employee_table(EmployeeID,First_Name,Last_Name,TC,Wages,Position) values(?,?,?,?,?)");
             pst.setString(1, EmployeeID);
pst.setString(2, First_Name);
              pst.setString(3, Last_Name);
              pst.setString(4, TC);
              pst.setString(5, Wages);
              pst.setString(6, Position);
               st.executeUpdate();
              JOptionPane.showMessageDialog(null, "Registation Created");
         catch (ClassNotFoundException | SOLException ex) {
              Logger.getLogger(Employee.class.getName()).log(Level.SEVERE, null, ex);
```

In this section, the code of how the operation works when the 'Add' button is clicked. We connect to the **database**. With phpMyAdmin, we create separate tables for each. I used my 'employee\_table' table in this section. I entered the information contained in it. Later, click the Add button. 'Registration Created' message appears on the panel.



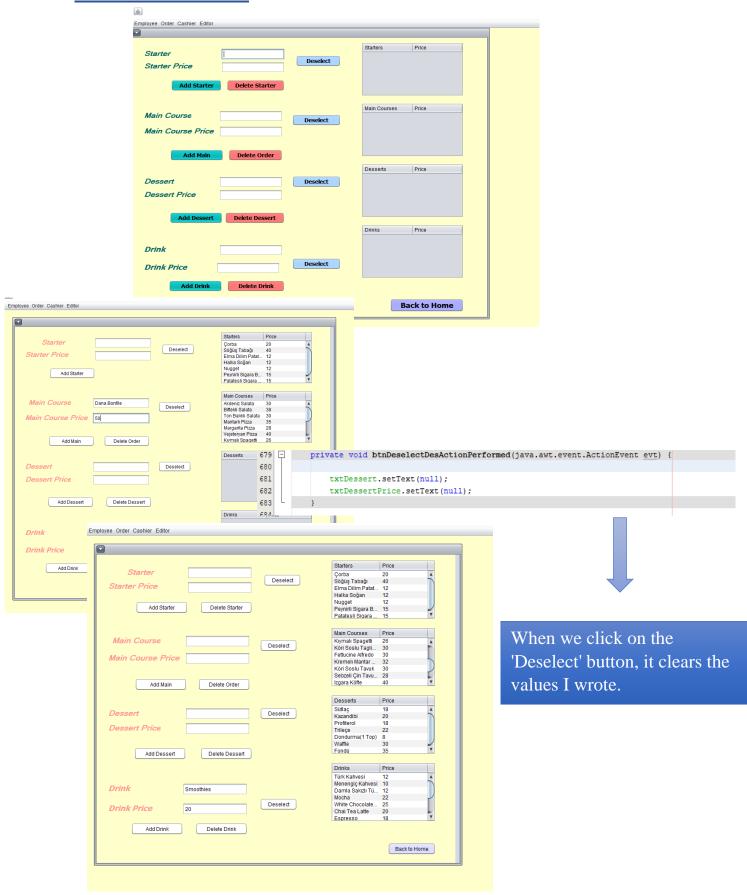
## **DATABASE 'ADD EMPLOYEE'**

	+ Seçenekler					
	EmployeelD	First_Name	Last_Name	TC	Wages	Position
t_table	EMPLOYEE010	Arife	Yalçın	1234	4000	Waiter
able	EmployeeID	Beyza	Madenoğlu	39675893457	5000	Cashier
/ee_table	EmployeeID	Sacidenur	Yalçın	4849673468943	3600	Waiter
_table	EmployeeID	Ayşe	Yalçın	7457568	4643	Waiter
	EmployeeID	Zeynep	Sude	56046t398467	2500	Waiter
table	EmployeeID	Emine	Yalçın	3857324856	8000	Manager
able	EmployeeID	Hatice	Menteşe	3458732	5000	cashier
_table	EmployeeID	Ece	Örten	54756454	3453	Waiter
	EmployeeID	Başak	Günay	4643734	1244	Waiter
	Employee Information	Arife Gül	YALÇIN	2625980788	10000	MANAGER

# **'BACK TO HOME' BUTTON**

```
private void btnBackActionPerformed(java.awt.event.ActionEvent evt) {
   homePage h = new homePage();
   h.setVisible(true);
   this.setVisible(false);
}
```

#### FRAME 'ADD MENU'



```
private void btnAddMainActionPerformed(java.awt.event.ActionEvent evt) {
       DefaultTableModel Mainmodel;
       Mainmodel = (DefaultTableModel) tblMains.getModel();
String Main = txtMain.getText();
       String MainPrice = txtMainPrice.getText();
           Class.forName("com.mysql.jdbc.Driver");
           con = DriverManager.getConnection("jdbc:mysql://localhost/restaurant", "root", "");
           pst = con.prepareStatement("insert into mains_table(Main, MainPrice) values(?,?)");
           pst.setString(1, Main);
           pst.setString(2, MainPrice);
           pst.executeUpdate();
      catch (ClassNotFoundException | SQLException ex) {
           Logger.getLogger(Employee.class.getName()).log(Level.SEVERE, null, ex);
       Mainmodel.insertRow(Mainmodel.getRowCount(), new Object[]{txtMain.getText(), txtMainPrice.getText()});
       txtMain.setText(null):
       txtMainPrice.setText(null);
       catch (Exception c) {
           JOptionPane.showMessageDialog(null, "You must enter all textfield");
           txtMain.setText(null);
           txtMainPrice.setText(null);
           btnAddMain.setEnabled(false);
```

In this section, the code of how the operation works when the 'Add' button is clicked. We connect to the **database**. With phpMyAdmin, I used my 'mains\_table' table in this section. I entered the information contained in it.

```
private void btnDeleteMainActionPerformed(java.awt.event.ActionEvent evt) {
   String sql= "delete from mains_table";
   try {
        Class.forName("com.mysql.jdbc.Driver");
        con = DriverManager.getConnection("jdbc:mysql://localhost/restaurant", "root", "");
        Statement stmt = con.createStatement();
        stmt.executeUpdate(sql);
   }
   catch (ClassNotFoundException | SQLException ex) {
        Logger.getLogger(AddMenu.class.getName()).log(Level.SEVERE, null, ex);
   }
}
```

When the 'DELETE' button is clicked. We connect to the **database**. With phpMyAdmin, I used my 'mains\_table' table in this section. Delete it the information.

# **DATABASE 'ADD MENU'**

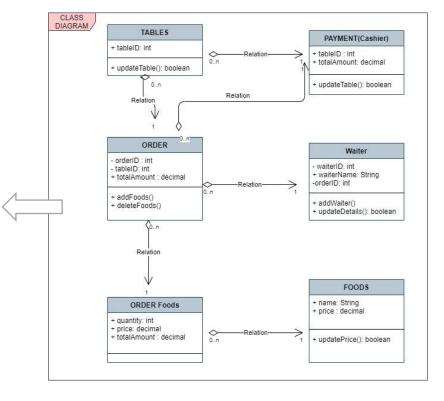


Drink	DrinkPrice
Türk Kahvesi	12
Menengiç Kahvesi	10
Damla Sakızlı Türk Kahvesi	12
Mocha	22
White Chocolate Mocha	25
Chai Tea Latte	20
Espresso	18
Latte	15
Soda	8
Su	5
Çay	5
Çay(Fincan)	8
Smoothies	20
Frappe	18
Bitki Çayları	15
Limonata	13

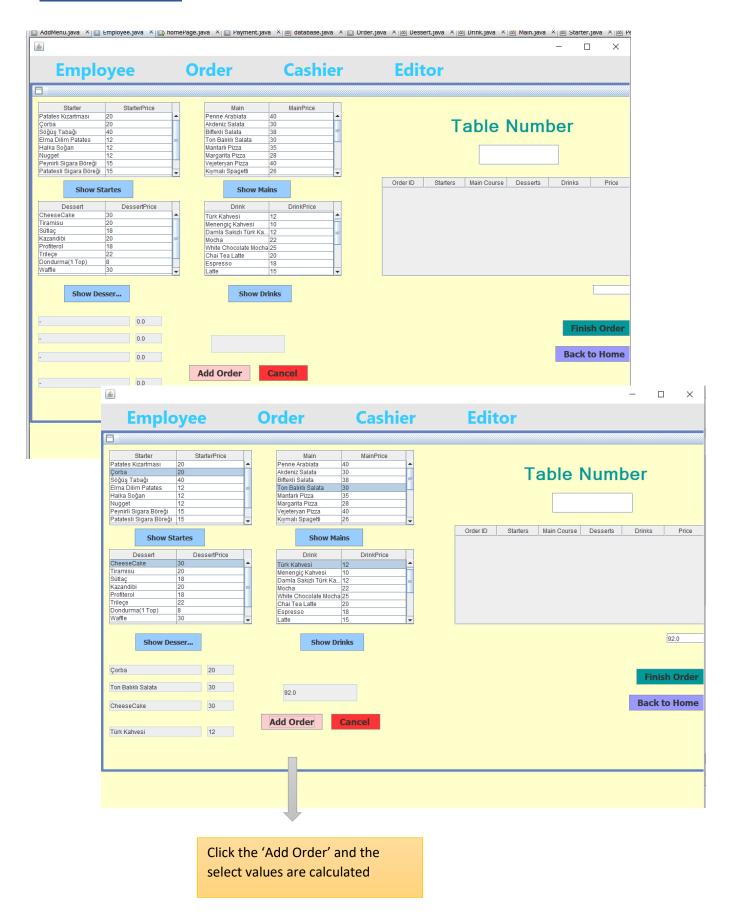
— <u>⊪</u> Yeni	Main	MainPrice
- dessert_table	Penne Arabiata	40
	Akdeniz Salata	30
B_ employee_table	Biftekli Salata	38
	Ton Balıklı Salata	30
mains_table	Mantarlı Pizza	35
	Margarita Pizza	28
B-	Vejeteryan Pizza	40
starter table	Kıymalı Spagetti	26
test	Köri Soslu Tagliatelli	30
ji test	Fettucine Alfredo	30
	Kremelı Mantar Soslu Tavuk	32
	Köri Soslu Tavuk	30
	Sebzeli Çin Tavuğu	28
	Izgara Köfte	40
	Dana Bonfile	50
	Tavuklu Wrap	28
	Burger	38
	İskender	35
	ı	

Starter	StarterPrice
Patates Kızartması	20
Çorba	20
Söğüş Tabağı	40
Elma Dilim Patates	12
Halka Soğan	12
Nugget	12
Peynirli Sigara Böreği	15
Patatesli Sigara Böreği	15
Kırmızı Mercimek Çorbası	20
Mercimek	15

Let's look at our Use-Case diagram that we prepared in the first part of our project. Here, with our 'Add Menu' option, we can add food like Starter, Main, Desert etc.



## FRAME 'ORDER'



```
History | 🕝 🖫 - 🖫 - | 🔍 🐶 👺 🖺 📮 | 🔗 😓 | 💇 💇 | 🥥 📵 | 🕮 🚅
                                                               String starter = txtStarterPrice.getPat();
runningCost += Double.parseDouble(starter);
rowCost += Double.parseDouble(starter);
txtCost.setText(String.valueOf(runningCost))
txtRowCost.setText(String.valueOf(rowCost));
 591
592
593
594
595
                                                                String main = txtMainPrice.getText();
runningCost += Double.parseDouble(main);
                                                                 rowCost += Double.parseDouble(main);
 596
 597
                                                                 txtCost.setText(String.valueOf(runningCost));
 598
                                                                 txtRowCost.setText(String.valueOf(rowCost));
 599
600
601
602
603
604
                                                               String d = txtDessertPrice.getText();
runningCost += Double.parseDouble(d);
rowCost += Double.parseDouble(d);
txtCost.setText(String.valueOf(runningCost));
txtRowCost.setText(String.valueOf(rowCost));
 605
                                                                String drink = txtDrinkPrice.getText();
 606
                                                                string drin - xxbrinkrine.getract(),
runningCost += Double.parseDouble(drink);
rowCost += Double.parseDouble(drink);
txtCost.setText(String.valueOf(runningCost));
txtRowCost.setText(String.valueOf(rowCost));
  607
  609
610
611
612
                                                                 String rowCostl = Double.toString(rowCost);
  613
                                                            Object xx = null;
 614
615
                                                               //
o.setOrderId((String) xx);
o.setStarter(txtStarterValue.getText());
o.setMain(txtMainValue.getText());
o.setDessett(txtDessertValue.getText());
o.setDrink(txtDrinkValue.getText());
 616
 618
619
620
621
                                                                o.setPrice(rowCostl);
 622
 623
624
                                                               //This creates the table to which the food orders and their price are placed.

model.insertRow(model.getRowCount(), new Object[](xx, txtStarterValue.getText(), txtMainValue.getText(), txtDrinkValue.getText(), txtDrinkValu
 625
 626
 627
628
629
630
631
                                                                 txtRowCost.setText("-");
```

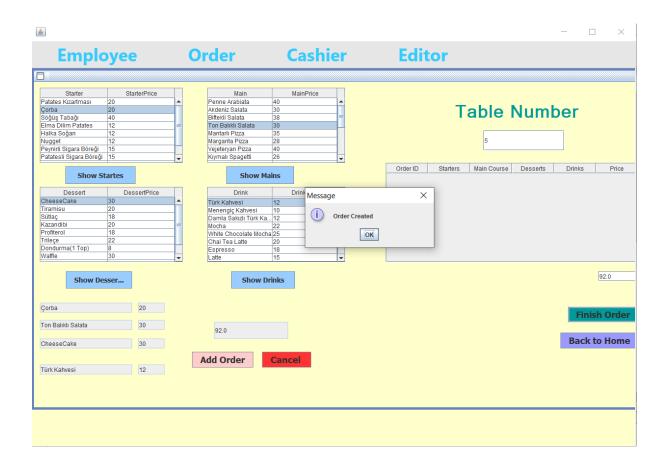
```
History 🔯 🖟 🔊 - 💐 👯 🞝 🖶 📮 🖟 😓 🕲 🖄 🔘 🗎 🕮 🚅
           String main = txtMainPrice.getText();
runningCost -= Double.parseDouble(main);
rowCost -= Double.parseDouble(main);
           txtCost.setText(String.valueOf(runningCost));
           txtRowCost.setText(String.valueOf(rowCost));
           String d = txtDessertPrice.getText();
           runningCost == Double.parseDouble(d);
rowCost == Double.parseDouble(d);
rowCost == SetText(String.valueOf(runningCost));
txtRowCost.setText(String.valueOf(rowCost));
           String drink = txtDrinkPrice.getText();
runningCost -= Double.parseDouble(drink);
rowCost -= Double.parseDouble(drink);
           txtCost.setText(String.valueOf(runningCost));
           txtRowCost.setText(String.valueOf(rowCost));
           String rowCostl = Double.toString(rowCost);
         Object xx = null;
           o.setOrderId((String) xx);
o.setStarter(txtStarterValue.getText());
o.setMain(txtMainValue.getText());
           o.setDessert(txtDessertValue.getText());
           o.setDrink(txtDrinkValue.getText());
           o.setPrice(rowCostl);
           //This creates the table to which the food orders and their price are placed.
model.insertRow(model.getRowCount(), new Object[]{xx, txtStarterValue.getText(), txtMainValue.getText(), txtDessertValue.getText(), txtDrinkValue.getText(), rowCostl});
           txtStarterValue.setText("-");
           txtMainValue.setText("-");
           txtDessertValue.setText("-");
txtDessertValue.setText("-");
txtDrinkValue.setText("-");
txtRowCost.setText("-");
           txtStarterPrice.setText("0.0");
           txtMainPrice.setText("0.0");
txtDessertPrice.setText("0.0")
txtDrinkPrice.setText("0.0");
           rowCost = 0;

    btnCancel1ActionPerformed >
```



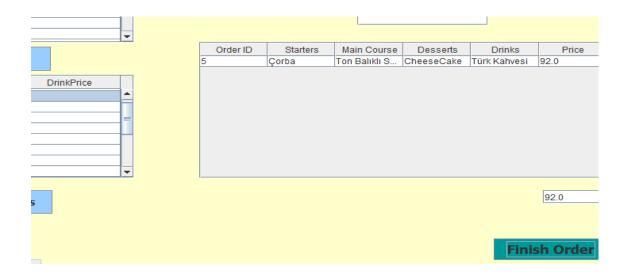
```
private void btnsActionPerformed(java.awt.event.ActionEvent evt) {
        String Starter = null ;
        String StarterPrice = null;
      try {
          Class.forName("com.mysql.jdbc.Driver");
          Connection con = DriverManager.getConnection("jdbc:mysql://localhost/restaurant", "root", "");
           Statement st = (Statement) con.createStatement();
          try ( ResultSet rs = st.executeQuery("Select * from starter table")) {
               int colcount = rs.getMetaData().getColumnCount();
               DefaultTableModel tm = new DefaultTableModel();
                   for(int i = 1;i<=colcount;i++)</pre>
                   tm.addColumn(rs.getMetaData().getColumnName(i));
                   while (rs.next())
                   Object[] row = new Object[colcount];
                   for(int i=1;i<=colcount;i++)</pre>
                      row[i-1] = rs.getObject(i);
                   tm.addRow(row);
               tblStarters.setModel(tm);
          con.close();
      } catch (ClassNotFoundException | SQLException ex) {
          Logger.getLogger(Order.class.getName()).log(Level.SEVERE, null, ex);
```

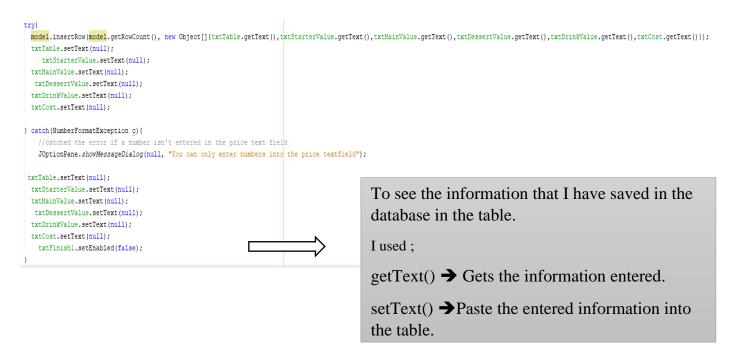
When clicked on Show buttons, it takes the data that I added to our menu from the databases where they are located.

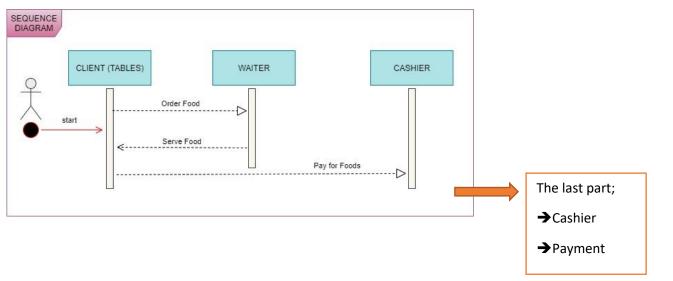


```
private void txtFinish1ActionPerformed(java.awt.event.ActionEvent evt) {
     DefaultTableModel model:
     model = (DefaultTableModel) tblOrder.getModel();
          String OrderID = txtTable.getText();
          String Starter = txtStarterValue.getText();
String main = txtMainValue.getText();
          String Dessert = txtDessertValue.getText();
String Drink = txtDrinkValue.getText();
String Price= txtCost.getText();
     try{
   Class.forName("com.mysql.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost/restaurant","root","");
   PreparedStatement pst = con.prepareStatement("insert into order_table(OrderID, Starter, main, Dessert, Drink, Price) values(?,?,?,?,?)");
pst.setString(1, OrderID);
          pst.setString(2, Starter);
          pst.setString(3, main);
          pst.setString(4, Dessert);
          pst.setString(5, Drink):
          pst.setString(6, Price);
          pst.executeUpdate();
          JOptionPane.showMessageDialog(null, "Order Created");
     catch (ClassNotFoundException | SQLException ex) {
          Logger.getLogger(Employee.class.getName()).log(Level.SEVERE, null, ex);
```

When the 'Finish Order' button is clicked, 'Order Created' message appears on the panel and the created order is saved in the database. Then click OK and the order appears in the table.







# FRAME 'PAYMENT'

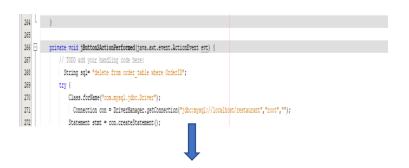
Employee	e Order	Cashier	Editor		
3					
Table Numb	per	Find			
Starte	r				
Main					
Main					
Desse	rt				
Price	PAY				
FIICE		Back to Home			
	Table Numb	er 3	Fir	nd	
	Starter				
vate void jButton1Acti	onPerformed(java.awt.event.Act:	ionEvent evt) {			
String OrderID = txt					
try {     Class.forName("co	m.mysql.jdbc.Driver");				
Connection con = PreparedStatement	DriverManager.getConnection("jo pst = con. <mark>prepareStatement</mark> ("so				
pst.setString(1, ResultSet rs = p	OrderID); st.executeQuery();				
<pre>if(rs.next() == {</pre>			elect * from or	der_table where O	rderID = ?"
JOptionPane. } else	showMessageDialog(this, "Table	Not Found");			
{					
String main	er = rs.getString("Starter"); = rs.getString("main"); rt = rs.getString("Dessert");	I got the data		er I wrote and got the	he data from
String Drink	= rs.getString("Drink"); = rs.getString("Price");	getText	() → Gets the	information entered	d.
	t(Starter.trim()); xt(main.trim());	setText	() → Paste the o	entered information	n into the tab
txtdessert.se txtdrink.setT	tText(Dessert.trim()); ext(Drink.trim());				
txtprice.setT	ext(Price.trim());				

Employee	Order	Cashier	Editor
Table Number	3	Find	
Starter	Peynirli Sigara Böreği		
Main	Vejeteryan Pizza		
Dessert	Dondurma(1 Top)		
Price 85.0	Mocha PAY	Back to Home	









#### I wrote;

"delete from order\_table where OrderID"

It reaches the data in the order where the Table Number is located and shows that the table is empty after the payment.