

# CSE1007 - Java Programming

## Lab Assessment 5

### JavaFX and JDBC

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### Question/Task

3. Write code for the following:-

Form1

item Name

Material Quality

Cost/sqm

**Calculate**

**The select material quality is Luxury and cost is 120Rs. per square metre**

- i) The “cost” text field should contain only non-negative value.
- ii) The JComboBox1 must contain Economic, Business and Luxury when the form window is opened.
- iii) The “material quality” should be set as “Luxury” by default.
- iv) When “calculate” button is clicked, the cost should be calculated & displayed as per the following criteria and message should be displayed on jLabel4 as given on the form and information to be stored in the database.

Material	COST(Rs./sqm)
Economic	50
Business	80
Luxury	120

- (v) create a report as what material was sold out per month to check the movement of goods

## Source Code

### *Java Main.fxml*

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<?import javafx.scene.control.Button?>
<?import javafx.scene.control.ComboBox?>
<?import javafx.scene.control.Label?>
<?import javafx.scene.control.TextField?>
<?import javafx.scene.layout.AnchorPane?>
<?import javafx.scene.text.Font?>
```

```
<AnchorPane maxHeight="-Infinity" maxWidth="-Infinity"
minHeight="-Infinity" minWidth="-Infinity" prefHeight="390.0"
prefWidth="420.0" style="-fx-background-color:
#FFFEFD5#FFFEFD5;" xmlns="http://javafx.com/javafx/16"
xmlns:fx="http://javafx.com/fxml/1"
fx:controller="controllers.mainController">
    <children>
        <Label fx:id="itemName" layoutX="32.0" layoutY="42.0"
prefHeight="17.0" prefWidth="90.0" text="item name" />
        <TextField fx:id="itemNameField" layoutX="134.0"
layoutY="38.0" prefHeight="43.0" prefWidth="96.0" />
        <Label fx:id="itemName1" layoutX="35.0" layoutY="119.0"
prefHeight="17.0" prefWidth="90.0" text="Material Quality" />
        <ComboBox fx:id="materialQualityField" editable="true"
layoutX="134.0" layoutY="120.0" prefHeight="32.0"
prefWidth="115.0" />
        <Label fx:id="itemName11" layoutX="35.0"
layoutY="213.0" prefHeight="17.0" prefWidth="90.0"
text="cost/sqkm" />
```

```

        <TextField fx:id="costField" layoutX="134.0"
layoutY="200.0" prefHeight="43.0" prefWidth="96.0" />

        <Button fx:id="btnCalc" layoutX="114.0" layoutY="271.0"
mnemonicParsing="false" onMouseClicked="#handleButtonAction"
prefHeight="49.0" prefWidth="136.0" text="Calculate" />

        <Label fx:id="lblResult" alignment="CENTER"
layoutX="60.0" layoutY="337.0" prefHeight="23.0"
prefWidth="275.0" textFill="#ff6354">

            <font>

                <Font name="Segoe UI" size="10.0" />

            </font>

        </Label>
    </children>
</AnchorPane>

```

## ***Main.java***

```
package home;
```

```

import javafx.application.Application;
import javafx.event.EventHandler;
import javafx.fxml.FXMLLoader;
import javafx.scene.Parent;
import javafx.scene.Scene;
import javafx.scene.input.MouseEvent;
import javafx.stage.Stage;
import javafx.stage.StageStyle;

```

```
public class Main extends Application {
```

```
    private double xOffset = 0;
```

```
private double yOffset = 0;
```

```
@Override  
public void start(Stage stage) throws Exception {  
    Parent root =  
FXMLLoader.load(getClass().getResource("/fxml/main.fxml"));  
    stage.initStyle(StageStyle.DECORATED);  
    stage.setMaximized(false);
```

```
        root.setOnMousePressed(new EventHandler<MouseEvent>()  
{  
    @Override  
    public void handle(MouseEvent event) {  
        xOffset = event.getSceneX();  
        yOffset = event.getSceneY();  
    }  
});
```

```
        root.setOnMouseDragged(new EventHandler<MouseEvent>()  
{  
    @Override  
    public void handle(MouseEvent event) {  
        stage.setX(event.getScreenX() - xOffset);  
        stage.setY(event.getScreenY() - yOffset);  
    }  
});  
stage.setTitle("Form1");  
Scene scene = new Scene(root);  
stage.setScene(scene);  
stage.show();
```

```
}
```

```
public static void main(String[] args) {  
    launch(args);  
}
```

```
}
```

### ***MainController.java***

```
package controllers;
```

```
import java.io.IOException;  
import java.net.URL;  
import java.sql.Connection;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.util.ResourceBundle;  
import javafx.fxml.FXML;  
import javafx.fxml.FXMLLoader;  
import javafx.fxml.Initializable;  
import javafx.scene.Node;  
import javafx.scene.Scene;  
import javafx.scene.control.Button;  
import javafx.scene.control.ComboBox;  
import javafx.scene.control.Label;  
import javafx.scene.control.TextField;  
import javafx.scene.input.MouseEvent;  
import javafx.scene.paint.Color;
```

```
import javafx.stage.Stage;
import utils.ConnectionUtil;
```

```
public class mainController implements Initializable {
```

```
    @FXML
    private Label lblResult;
```

```
    @FXML
    private ComboBox<String> materialQualityField;
```

```
    @FXML
    private TextField itemNameField;
    @FXML
    private TextField costField;
```

```
    @FXML
    private Button btnCalc;
```

```
    Connection con = null;
    PreparedStatement preparedStatement = null;
    ResultSet resultSet = null;
    int cost;
    @FXML
    public void handleButtonAction(MouseEvent event) {
```

```
        if (event.getSource() == btnCalc) {
            System.out.println("hihihihi");
            try {
                System.out.println("calc cost");
```

```

        String str="select * from labda5 where
Quality='"+(qua)+"'";
        rs=stmt.executeQuery(str);
        while (rs.next()) {
            String q = rs.getString("Quality");
            cost = rs.getInt("cost");
        }
        jTextField3.setText(""+cost);
        jLabel14.setText("The selected material
quality is "+qua+" and the cost is Rs. "+cost+" per square
metre.");

```

```

        } catch (Exception ex) {
            System.err.println(ex.getMessage());
        }
    }
}

```

```

@Override
public void initialize(URL url, ResourceBundle rb) {
    // TODO
    materialQualityField.getItems().addAll("Economic",
"Business", "Luxury");
    materialQualityField.getSelectionModel().select("Luxury");
}

```

```

public mainController() {
    con = ConnectionUtil.conDB();
}

```

```
private void setLblError(Color color, String text) {  
    lblResult.setTextFill(color);  
    lblResult.setText(text);  
    System.out.println(text);  
}  
}
```

## Output Screenshots

The screenshot shows a Windows application window titled "Form1". The form has a light orange background and contains the following elements:

- A label "item name" followed by a text box containing the text "sample".
- A label "Material Quality" followed by a dropdown menu showing "Luxury".
- A label "cost/sqkm" followed by a text box containing the text "123".
- A "Calculate" button.
- A message box at the bottom with the text: "The select material cost is luxury and cost is 120Rs per sq.km".