

# DIGITAL ASSIGNMENT



# VIT<sup>®</sup>

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**Vellore Institute of Technology**

(Deemed to be University under section 3 of UGC Act, 1956)

**ITE1007 - Java Programming**

**FALL SEMESTER 2022-23**

**SUBMITTED BY:**

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**To: Senthil Murgan**

01. Design a Java FX based windows application to Views, Inserts and Updates Staff information stored in a Database. A Sample Screen Shot is as Follows:

The screenshot shows a JavaFX application window titled "Exercise25\_1". Inside the window, there is a section titled "Staff Information". This section contains several text input fields and a dropdown menu. The fields are labeled as follows: "ID" (containing "123456789"), "Last Name" (containing "Johnson"), "First Name" (containing "George"), "Address" (containing "10 Main Street"), "City" (containing "Savannah"), "State" (containing "GA"), and "Telephone" (containing "912"). There is also a small dropdown menu next to the "First Name" field, currently showing "mi" and "K". Below the form, there are four buttons: "View", "Insert", "Update", and "Clear".

#### CODE-

```
package application;
```

```
import java.sql.Connection;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;  
import java.sql.Statement;
```

```
import javafx.application.Application;  
import javafx.geometry.Pos;  
import javafx.scene.Scene;  
import javafx.scene.control.Button;  
import javafx.scene.control.Label;  
import javafx.scene.control.TextArea;  
import javafx.scene.control.TextField;  
import javafx.scene.layout.BorderPane;  
import javafx.scene.layout.GridPane;  
import javafx.scene.layout.HBox;  
import javafx.scene.layout.Pane;  
import javafx.stage.Stage;
```

```
public class Megha_Form extends Application {  
    @Override  
    public void start(Stage primaryStage) throws Exception {  
        Button b1, b2, b3, b4;
```

```

HBox bottom;
TextField tf1, tf2, tf3, tf4, tf5, tf6, tf7;
TextArea ta1;
Label l1, l2, l3, l4, l5, l6, l7, l8;
Connection con;
Statement st;
PreparedStatement pst;
ResultSet rs;
HBox h1, h2, h3, h4, h5;
GridPane grid = new GridPane();

// setFont(new Font("Arial", Font.BOLD, 25));
bottom = new HBox();
b1 = new Button("View");
// bottom.
bottom.getChildren().add(b1);
b2 = new Button("Insert");
bottom.getChildren().add(b2);
b3 = new Button("Delete");
bottom.getChildren().add(b3);
b4 = new Button("Clear");
bottom.getChildren().add(b4);
bottom.setAlignment(Pos.CENTER);
l1 = new Label("ID");
// top.add(l1);
tf1 = new TextField();
// top.add(tf1);
// p1ge(l1);
h1 = new HBox(l1, tf1);
//
// top.add(p1);

l2 = new Label("LastName");
// top.add(l2);
tf2 = new TextField();
// top.add(tf2);

// h2.getChildren().addAll(l2, tf2);

l3 = new Label("FirstName");
// top.add(l3);
tf3 = new TextField();
// top.add(tf3);

l4 = new Label("MI");
// top.add(l4);
tf4 = new TextField();

```

```

// top.add(tf4);
h2 = new HBox(l2, tf2, l3, tf3, l4, tf4);

l5 = new Label("Address");
// top.add(l5);
ta1 = new TextArea();
// top.add(ta1);
h3 = new HBox(l5, ta1);

l6 = new Label("City");
// top.add(l6);
tf5 = new TextField();
// top.add(tf5);

l7 = new Label("State");
// top.add(l7);
tf6 = new TextField();
// top.add(tf6);
h4 = new HBox(l6,tf5, l7, tf6);

l8 = new Label("Telephone");
// top.add(l8);
tf7 = new TextField();
// top.add(tf7);
h5 = new HBox(l8,tf7);

// validate();

grid.add(h1, 0, 0);
grid.add(h2, 0, 1);
grid.add(h3, 0, 2);
grid.add(h4, 0, 3);
grid.add(h5, 0, 4);
// bottom.getChildren().addAll(b1,b2,b3,b4);
// b1.addActionListener(this);
// b2.addActionListener(this);
// b3.addActionListener(this);
// b4.addActionListener(this);

BorderPane border = new BorderPane(grid, null, null, bottom, null);
// border.setBackground(Color.ORANGE);
primaryStage.setScene(new Scene(new BorderPane(grid, null, null, bottom, null)));

    primaryStage.setTitle("Megha Maitin");
    primaryStage.show();
}

```

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

## OUTPUT-

The image shows a Java Swing window titled "Megha Maitin". Inside the window is a form with the following fields and controls:

- ID**: A single-line text input field.
- LastName**: A single-line text input field.
- FirstName**: A single-line text input field.
- MI**: A single-line text input field.
- Address**: A large multi-line text area.
- City**: A single-line text input field.
- State**: A single-line text input field.
- Telephone**: A single-line text input field.
- Buttons**: Four buttons labeled "View", "Insert", "Delete", and "Clear" are located at the bottom right of the form.

02. Let's say that you are assigned to develop the JDBC based Console Java Application for searching through various book available in a Library by Book name/Publication Year/Author name based on the framework that consists of POJO classes, console based presentation layer and DAO layer. Use Lambda Expressions wherever appropriate.