

LAB EXERCISE ON JAVAFX

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COURSE : JAVA PROGRAMMING LAB

SLOT : L13-L14

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1)Write a program that displays the following stage using more than one pane

GridPane Layout

Code :

```
import javafx.application.Application;
//import javafx.fxml.FXMLLoader;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.GridPane;
import javafx.scene.layout.HBox;
import javafx.stage.Stage;

import java.io.IOException;

public class GLayout extends Application {
    @Override
    public void start(Stage stage) throws IOException {
        Button btn1 = new Button("Button1");
        Button btn2 = new Button("Button2");
        Button btn3 = new Button("Button3");
        Button btn4 = new Button("Button4");
        Button btn5 = new Button("Button5");
        Button btn6 = new Button("Button6");
        GridPane gp = new GridPane();
```

```

gp.add(btn1, 0 , 1,1,1);

gp.add(btn2, 1 , 0,1,1);

gp.add(btn3, 2 , 1,1,1);

gp.add(btn4, 3 , 1,2,1);

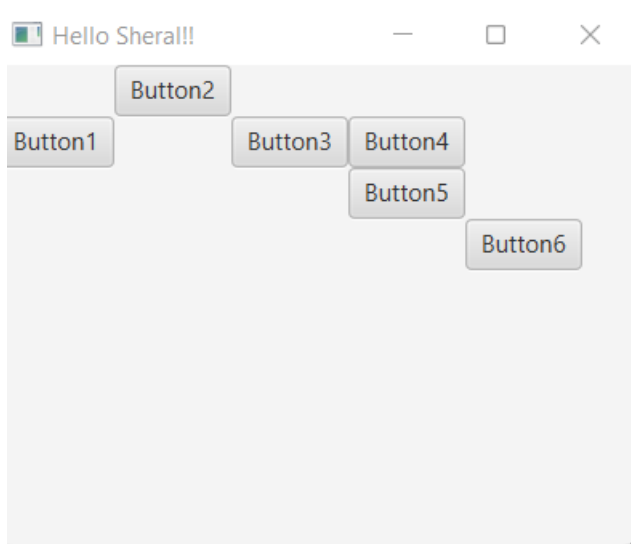
        gp.add(btn5, 4 , 3,1,1);

        gp.add(btn6, 5 , 5,1,1);
// HBox root = new HBox(B1);
Scene scene = new Scene(gp, 320, 240);
stage.setTitle("Hello Sheral!!");
stage.setScene(scene);
stage.show();
}

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

```

Output :



```
D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls GLayout.java
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls GLayout
```

HBox Layout

Code :

```
import javafx.application.Application;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.layout.HBox;
import javafx.stage.Stage;
import java.io.IOException;

public class H_box extends Application
{

    public void start(Stage primaryStage)throws IOException
    {

        Button btn1 = new Button("Button 1");
```

```
Button btn2 = new Button("Button 2");
```

```
Button btn3 = new Button("Button 3");
```

```
Button btn4 = new Button("Button 4");
```

```
HBox h = new HBox(btn1,btn2,btn3,btn4 );
```

```
Scene s = new Scene(h , 200 , 100);
```

```
primaryStage.setTitle("Hbox Layout ");
```

```
primaryStage.setScene(s);
```

```
primaryStage.show();
```

```
}
```

```
public static void main(String[] args)
```

```
{
```

```
launch(args);
```

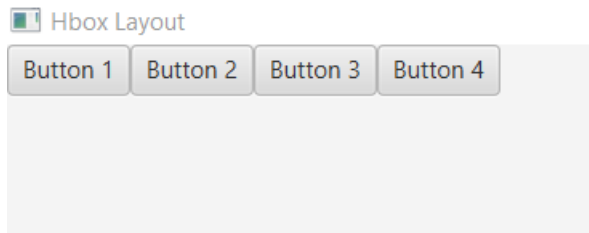
```
}
```

```
}
```

Output :

```
D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls H_box.jav
```

```
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls H_box
```



VBox

Code :

```
import javafx.application.Application;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.stage.Stage;
import java.io.IOException;
import javafx.scene.layout.VBox;
```

```
public class V_Box extends Application
{
    public void start(Stage stage)throws IOException
    {
```

```
        Button btn1 = new Button("Button 1" );
```

```
        Button btn2 = new Button("Button 2" );
```

```
        Button btn3 = new Button("Button 3" );
```

```
        Button btn4 = new Button("Button 4" );
```

```
        VBox v = new VBox(btn1 , btn2 , btn3 ,btn4);
```

```
        Scene s = new Scene(v , 200 , 100);
```

```
stage.setTitle("VBox Layout ");
```

```
stage.setScene(s);
```

```
stage.show();
```

```
}
```

```
public static void main(String[] args)
```

```
{
```

```
launch(args);
```

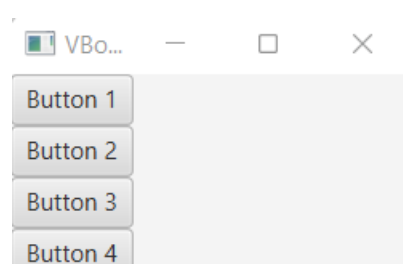
```
}
```

```
}
```

Output :

```
D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls V_Box.java
```

```
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls V_Box
```



Stack Pane Layout

Code :

```
import javafx.application.Application;
```

```
import javafx.scene.Scene;
```

```
import javafx.scene.control.Button;
```

```
import javafx.scene.layout.StackPane;
import javafx.stage.Stage;
import java.io.IOException;
import javafx.scene.layout.VBox;
import javafx.scene.layout.HBox;

public class SPane extends Application
{

    public void start(Stage primaryStage) throws IOException
    {

        Button btn1 = new Button("Button 1");

        Button btn2 = new Button("Button 2");

        Button btn3 = new Button("Button 3");

        Button btn4 = new Button("Button 4");

        //var topStackPane = new StackPane( btn1, btn2);

        var bottomStackPane = new StackPane(new HBox(btn3,btn4,btn2,btn1));

        //r.getChildren().addAll(btn1,btn2);
        // r.getChildren().add(btn2);
        // r.getChildren().add(btn3);
        // r.getChildren().add(btn4);
```

```
Scene s = new Scene(bottomStackPane, 200 ,200);
```

```
primaryStage.setScene(s);
```

```
primaryStage.show();
```

```
}
```

```
public static void main(String[] args)
```

```
{
```

```
launch(args);
```

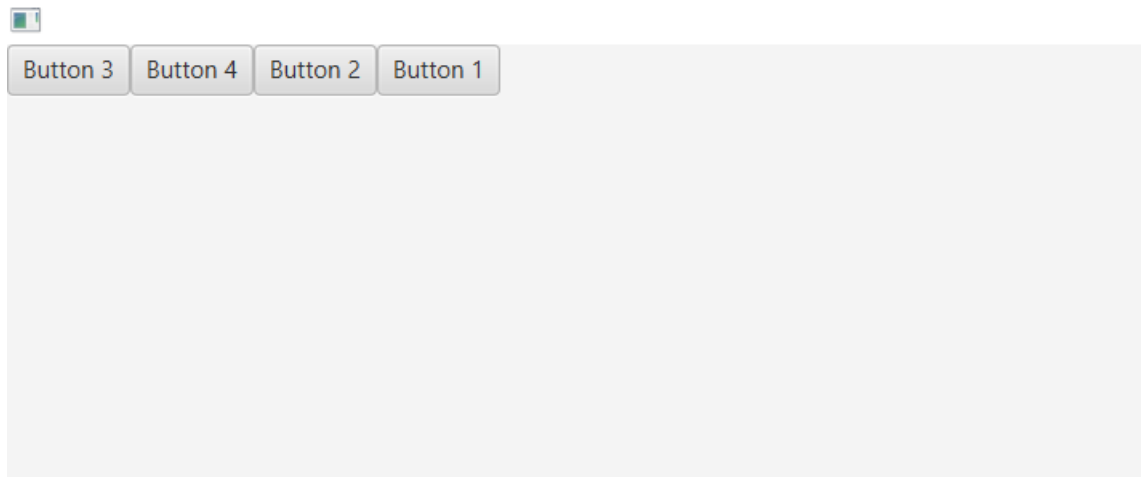
```
}
```

```
}
```

Output :

```
D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls SPane.jav
```

```
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls SPane
```

2) Write a program that displays four lines of text in four Labels:

- Write your name, ID, Address, Phone in labels respectively.
- Set the background of the labels to white.
- Set the text color of the labels to black, blue, cyan, green respectively.
- Set the font of each label to TimesRoman, bold, and 20 pixels.
- Set the border of each label to a line border with yellow colour

Code :

```
import javafx.application.Application;
import javafx.geometry.Insets;
import javafx.scene.Scene;
import javafx.scene.control.Label;
import javafx.scene.layout.VBox;
import javafx.stage.Stage;

public class Labels extends Application {

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

```

@Override

public void start(Stage primaryStage) {

    VBox rootPane = new VBox(10);

    rootPane.setPadding(new Insets(15, 5, 15, 5));

    Scene scene = new Scene(rootPane, 320, 240);

    String commonStyles = "-fx-background-color: white;" +
        "-fx-font-family: 'Times New Roman';" +
        "-fx-font-size: 20px;" +
        "-fx-font-weight: bold;" +
        "-fx-border-style: solid;" +
        "-fx-border-color: yellow;";

    rootPane.getChildren().addAll(
        new Label("Name: Sheral Waskar") {{
            setStyle(commonStyles + "-fx-text-fill: black;");
        }},

        new Label("ID: 20BCE1182") {{
            setStyle(commonStyles + "-fx-text-fill: blue;");
        }},

        new Label("Address: Chennai , India") {{
            setStyle(commonStyles + "-fx-text-fill: cyan;");
        }},

        new Label("Phone: +9231889393") {{
            setStyle(commonStyles + "-fx-text-fill: green;");
        }}
    );
}

```

```
primaryStage.setScene(scene);
```

```
primaryStage.centerOnScreen();
```

```
primaryStage.setTitle("Label");
```

```
primaryStage.show();
```

```
}
```

```
}
```

Output :

```
D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls Labels.java
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls Labels
```



3) Display a stage that contains nine labels. A label may display an image icon for X, an image icon for O, or nothing. What to display is randomly decided. Use the `Math.random()` method to generate an integer 0, 1, or 2, which corresponds to displaying a cross image icon, a not image icon, or nothing.

Code :

```
import javafx.application.Application;
```

```
import javafx.geometry.Pos;
```

```

import javafx.scene.Scene;
import javafx.scene.image.Image;
import javafx.scene.layout.GridPane;
import javafx.stage.Stage;
import javafx.scene.image.ImageView;
public class TicTacToe extends Application
{

    public void start(Stage primaryStage)
    {
        int j,i;
        GridPane p = new GridPane();

        p.setAlignment(Pos.CENTER);
        for( i = 0; i< 3 ; i ++);
        {

            for ( j=0;j<3;j++)

            {

                int val = (int)(Math.random()*3);
                if(val != 2)
                {

                    String img = (val > 0 ) ? "x.gif" : "o.gif";
                    p.add(new ImageView(new Image(img)) , j ,i);
                }

            }

        }
    }
}

```

```

Scene s = new Scene(p , 350 , 350 );
primaryStage.setTitle("Tic Tac Toe " );
primaryStage.setScene(s);
primaryStage.show();
}

```

```

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

```

Output :

```

D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls TicTacToe
java
D:\SEM 4\CSE1007>java --module-path javafx-sdk-18\lib --add-modules javafx.controls TicTacToe

```



4) Question 4 Using any database of your choice, create a table VITStudent with the following fields: RegNo, FirstName, LastName, Gender, Program (BCE, BEE, BME, BAI, BCL), NoOfCreditsEarned,

Joining Year. 1. Design a JavaFX program to read the above details from the user and save them into the table. Use appropriate UI controls. 2. Develop a JavaFX program that has three buttons “Next Record”, “Previous Record” and “Clear.” Use a text field to display the student’s details when the user clicks next or previous buttons. Clear the text field when the user clicks ‘clear’ button. 3. Develop a JavaFX program to modify a student data. Include a textfield to read the RegNo of the student, display the details of that student obtained from the table in appropriate controls. The user should be allowed to modify only the NoOfCreditsEarned. Once new value is entered, provide a ‘Update Record’ button to update the record. 4. Develop a JavaFX program to remove a student data. Include a textfield to read the RegNo of the student, display the details of that student obtained from the table in appropriate controls. Provide a ‘Delete Record’ button to remove the record

Code :

Part 1:

```
import javafx.application.Application;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.*;
import javafx.scene.layout.GridPane;
import javafx.scene.paint.Color;
import javafx.scene.text.Text;
import javafx.stage.Stage;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;

public class LabQ4_1 extends Application {

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

@Override

```
public void start(Stage stage) {
```

```
    GridPane gridPane = new GridPane();
```

```
    gridPane.setMinSize(400, 200);
```

```
    gridPane.setPadding(new Insets(10, 10, 10, 10));
```

```
    gridPane.setVgap(20);
```

```
    gridPane.setHgap(5);
```

```
    gridPane.setAlignment(Pos.CENTER);
```

```
    Text tRegNo = new Text("Registration No.");
```

```
    Text tFName = new Text("First Name");
```

```
    Text tLName = new Text("Last Name");
```

```
    Text tGender = new Text("Gender");
```

```
    Text tProgram = new Text("Program");
```

```
    Text tNOCredit = new Text("Credits");
```

```
    Text tJYear = new Text("Joining Year");
```

```
    TextField tfRegNo = new TextField();
```

```
    TextField tfFName = new TextField();
```

```
    TextField tfLName = new TextField();
```

```
    ToggleGroup toggleGroup = new ToggleGroup();
```

```
    RadioButton maleRadio = new RadioButton("Male");
```

```
    RadioButton femaleRadio = new RadioButton("Female");
```

```
    maleRadio.setToggleGroup(toggleGroup);
```

```
    femaleRadio.setToggleGroup(toggleGroup);
```

```
    ChoiceBox programChoiceBox = new ChoiceBox();
```

```
programChoiceBox.getItems().addAll("BCE","BEE","BME","BAI","BCL");
```

```
TextField tfNOCredit = new TextField();
```

```
TextField tfJYear = new TextField();
```

```
Button submit = new Button("Submit");
```

```
gridPane.add(tRegNo,0,0);
```

```
gridPane.add(tfRegNo,1,0);
```

```
gridPane.add(tFName,0,1);
```

```
gridPane.add(tfFName,1,1);
```

```
gridPane.add(tLName,0,2);
```

```
gridPane.add(tfLName,1,2);
```

```
gridPane.add(tGender,0,3);
```

```
gridPane.add(maleRadio,1,3);
```

```
gridPane.add(femaleRadio,2,3);
```

```
gridPane.add(tProgram,0,4);
```

```
gridPane.add(programChoiceBox,1,4);
```

```
gridPane.add(tNOCredit,0,5);
```

```
gridPane.add(tfNOCredit,1,5);
```

```
gridPane.add(tJYear,0,6);
```

```
gridPane.add(tfJYear,1,6);
```

```
gridPane.add(submit,1,7);
```



```

Scene scene = new Scene(gridPane,500,500, Color.BLACK);
stage.setScene(scene);
stage.setTitle("Exercise-4 Part-1");
stage.show();

submit.setOnAction(actionEvent -> {
    String regNo = tfRegNo.getText();
    String fname = tfFName.getText();
    String lname = tfLName.getText();
    String gender = null;
    if(maleRadio.isSelected()){
        gender = maleRadio.getText();
    }
    else if(femaleRadio.isSelected()){
        gender = femaleRadio.getText();
    }
    String program = null;
    if(programChoiceBox.getValue()!=null)
        program = programChoiceBox.getValue().toString();

    int credit = Integer.parseInt(tfNOCredit.getText());

    String jYear = tfJYear.getText();

    try{
        System.out.println("connecting to the data source.....");
        Connection con=
        DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE","system","abc123");

```

```

        PreparedStatement ps = con.prepareStatement("insert into VITStudent values
(?,?,?,?,?,?,?)");

        ps.setString(1, regNo);
        ps.setString(2, fname);
        ps.setString(3, lname);
        ps.setString(4, gender);
        ps.setString(5, program);
        ps.setInt(6, credit);
        ps.setString(7, jYear);

        int count = ps.executeUpdate();

        System.out.println(count + " Number of records inserted");

        con.close();
    }
    catch (Exception e){
        System.out.println(e);
    }
    });
}
}

```

Part 2:

```

import javafx.application.Application;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.*;
import javafx.scene.layout.GridPane;
import javafx.scene.paint.Color;
import javafx.scene.text.Text;
import javafx.stage.Stage;

```

```
import java.sql.*;
```

```
public class LabQ4_2 extends Application {
```

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

```
    @Override
```

```
    public void start(Stage stage) {
```

```
        GridPane gridPane = new GridPane();
```

```
        gridPane.setMinSize(400, 200);
```

```
        gridPane.setPadding(new Insets(10, 10, 10, 10));
```

```
        gridPane.setVgap(20);
```

```
        gridPane.setHgap(5);
```

```
        gridPane.setAlignment(Pos.CENTER);
```

```
        Text tRegNo = new Text("Registration No.");
```

```
        Text tFName = new Text("First Name");
```

```
        Text tLName = new Text("Last Name");
```

```
        Text tGender = new Text("Gender");
```

```
        Text tProgram = new Text("Program");
```

```
        Text tNOCredit = new Text("Credits");
```

```
        Text tJYear = new Text("Joining Year");
```

```
        TextField tfRegNo = new TextField();
```

```
        TextField tfFName = new TextField();
```

```
TextField tfLName = new TextField();
```

```
TextField tfGender = new TextField();
```

```
TextField tfProgram = new TextField();
```

```
TextField tfNOCredit = new TextField();
```

```
TextField tfJYear = new TextField();
```

```
Button preButton = new Button("Previous");
```

```
Button clearButton = new Button("Clear");
```

```
Button nextButton = new Button("Next");
```

```
gridPane.add(tRegNo,0,0);
```

```
gridPane.add(tfRegNo,1,0);
```

```
gridPane.add(tFName,0,1);
```

```
gridPane.add(tfFName,1,1);
```

```
gridPane.add(tLName,0,2);
```

```
gridPane.add(tfLName,1,2);
```

```
gridPane.add(tGender,0,3);
```

```
gridPane.add(tfGender,1,3);
```

```
gridPane.add(tProgram,0,4);
```

```
gridPane.add(tfProgram,1,4);
```

```
gridPane.add(tNOCredit,0,5);
```

```
gridPane.add(tfNOCredit,1,5);
```

```
gridPane.add(tJYear,0,6);
```

```
gridPane.add(tfJYear,1,6);
```

```
gridPane.add(preButton,0,7);
```

```
gridPane.add(clearButton,1,7);
```

```
gridPane.add(nextButton,2,7);
```

```
tfRegNo.setDisable(true);
```

```
tfFName.setDisable(true);
```

```
tfLName.setDisable(true);
```

```
tfGender.setDisable(true);
```

```
tfProgram.setDisable(true);
```

```
tfNOCredit.setDisable(true);
```

```
tfJYear.setDisable(true);
```

```
Scene scene = new Scene(gridPane,500,500, Color.BLACK);
```

```
stage.setScene(scene);
```

```
stage.setTitle("Exercise-4 Part-2");
```

```
stage.show();
```

```
clearButton.setOnAction(actionEvent -> {
```

```
    tfRegNo.setText(null);
```

```
    tfFName.setText(null);
```

```
    tfLName.setText(null);
```

```
    tfGender.setText(null);
```

```
    tfProgram.setText(null);
```

```
    tfNOCredit.setText(null);
```

```
    tfJYear.setText(null);
```

```
});
```

```
try{
```

```

System.out.println("connecting to the data source.....");

Connection con = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE", "system",
" abc123");

Statement stmt = con.createStatement();

ResultSet rs = stmt.executeQuery("Select * from VITStudent");

preButton.setOnAction(actionEvent -> {

    try {

        rs.previous();

        tfRegNo.setText(rs.getString(1));

        tfFName.setText(rs.getString(2));

        tfLName.setText(rs.getString(3));

        tfGender.setText(rs.getString(4));

        tfProgram.setText(rs.getString(5));

        tfNOCredit.setText(rs.getString(6));

        tfJYear.setText(rs.getString(7));

    }

    catch (Exception e){

        e.printStackTrace();

    }

});

nextButton.setOnAction(actionEvent -> {

    try {

        rs.next();

        tfRegNo.setText(rs.getString(1));

        tfFName.setText(rs.getString(2));

        tfLName.setText(rs.getString(3));

        tfGender.setText(rs.getString(4));

        tfProgram.setText(rs.getString(5));

        tfNOCredit.setText(rs.getString(6));

        tfJYear.setText(rs.getString(7));

    }

}

```

```

        catch (Exception e){
            e.printStackTrace();
        }
    });

}

catch (Exception e){
    e.printStackTrace();
}
}
}

```

Part 3:

```

import javafx.application.Application;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.*;
import javafx.scene.layout.GridPane;
import javafx.scene.paint.Color;
import javafx.scene.text.Text;
import javafx.stage.Stage;

import java.sql.*;

public class LabQ4_3 extends Application {

    public static void main(String[] args) {

```

```
    launch(args);  
}
```

```
@Override
```

```
public void start(Stage stage) {
```

```
    GridPane gridPane = new GridPane();
```

```
    gridPane.setMinSize(400, 200);
```

```
    gridPane.setPadding(new Insets(10, 10, 10, 10));
```

```
    gridPane.setVgap(20);
```

```
    gridPane.setHgap(5);
```

```
    gridPane.setAlignment(Pos.CENTER);
```

```
    Text tRegNo = new Text("Registration No.");
```

```
    Text tFName = new Text("First Name");
```

```
    Text tLName = new Text("Last Name");
```

```
    Text tGender = new Text("Gender");
```

```
    Text tProgram = new Text("Program");
```

```
    Text tNOCredit = new Text("Credits");
```

```
    Text tJYear = new Text("Joining Year");
```

```
    TextField tfRegNo = new TextField();
```

```
    TextField tfFName = new TextField();
```

```
    TextField tfLName = new TextField();
```

```
    TextField tfGender = new TextField();
```

```
    TextField tfProgram = new TextField();
```

```
    TextField tfNOCredit = new TextField();
```



```
TextField tfJYear = new TextField();
```

```
Button read = new Button("Read");
```

```
Button modify = new Button("Modify");
```

```
gridPane.add(tRegNo,0,0);
```

```
gridPane.add(tfRegNo,1,0);
```

```
gridPane.add(read,2,0);
```

```
gridPane.add(tfName,0,1);
```

```
gridPane.add(tfFName,1,1);
```

```
gridPane.add(tLName,0,2);
```

```
gridPane.add(tfLName,1,2);
```

```
gridPane.add(tGender,0,3);
```

```
gridPane.add(tfGender,1,3);
```

```
gridPane.add(tProgram,0,4);
```

```
gridPane.add(tfProgram,1,4);
```

```
gridPane.add(tNOCredit,0,5);
```

```
gridPane.add(tfNOCredit,1,5);
```

```
gridPane.add(tJYear,0,6);
```

```
gridPane.add(tfJYear,1,6);
```

```
gridPane.add(modify,1,7);
```

```
tfFName.setDisable(true);
```

```
tfLName.setDisable(true);  
tfGender.setDisable(true);  
tfProgram.setDisable(true);  
tfNOCredit.setDisable(true);  
tfJYear.setDisable(true);
```

```
Scene scene = new Scene(gridPane,500,500, Color.BLACK);  
stage.setScene(scene);  
stage.setTitle("Exercise-4 Part-3");  
stage.show();
```

```
read.setOnAction(actionEvent -> {  
    String regNo = tfRegNo.getText();  
  
    try{  
        System.out.println("connecting to the data source.....");  
        Connection con = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE",  
"system", " root");  
        Statement stmt = con.createStatement();  
        ResultSet rs = stmt.executeQuery("Select * from VITStudent where RegNo='"+regNo+"'");  
        rs.next();  
        tfRegNo.setText(rs.getString(1));  
        tfFName.setText(rs.getString(2));  
        tfLName.setText(rs.getString(3));  
        tfGender.setText(rs.getString(4));  
        tfProgram.setText(rs.getString(5));  
        tfNOCredit.setText(rs.getString(6));  
        tfJYear.setText(rs.getString(7));
```

```

        con.close();
    }
    catch (Exception e){
        System.out.println(e);
    }
    tfNOCredit.setDisable(false);
});

modify.setOnAction(actionEvent -> {
    String regNo = tfRegNo.getText();
    String credit = tfNOCredit.getText();

    try{
        System.out.println("connecting to the data source.....");
        Connection con=
DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE","system"," root");
        Statement stmt = con.createStatement();
        stmt.executeUpdate("update vitstudent set credits="+credit+" where regno='"+regNo+"'");
        con.close();
    }
    catch (Exception e){
        System.out.println(e);
    }
});
}
}

```

Part 4:

```
import javafx.application.Application;
```

```
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.*;
import javafx.scene.layout.GridPane;
import javafx.scene.paint.Color;
import javafx.scene.text.Text;
import javafx.stage.Stage;
```

```
import java.sql.*;
```

```
public class LabQ4_4 extends Application {
```

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

```
    @Override
```

```
    public void start(Stage stage) {
```

```
        GridPane gridPane = new GridPane();
```

```
        gridPane.setMinSize(400, 200);
```

```
        gridPane.setPadding(new Insets(10, 10, 10, 10));
```

```
        gridPane.setVgap(20);
```

```
        gridPane.setHgap(5);
```

```
        gridPane.setAlignment(Pos.CENTER);
```

```
        Text tRegNo = new Text("Registration No.");
```

```
        Text tFName = new Text("First Name");
```

```
Text tLName = new Text("Last Name");
Text tGender = new Text("Gender");
Text tProgram = new Text("Program");
Text tNOCredit = new Text("Credits");
Text tJYear = new Text("Joining Year");
```

```
TextField tfRegNo = new TextField();
TextField tfFName = new TextField();
TextField tfLName = new TextField();
```

```
TextField tfGender = new TextField();
```

```
TextField tfProgram = new TextField();
```

```
TextField tfNOCredit = new TextField();
TextField tfJYear = new TextField();
```

```
Button read = new Button("Read");
Button delete = new Button("Delete");
```

```
gridPane.add(tRegNo,0,0);
gridPane.add(tfRegNo,1,0);
gridPane.add(read,2,0);
```

```
gridPane.add(tfFName,0,1);
gridPane.add(tfFName,1,1);
```

```
gridPane.add(tLName,0,2);
gridPane.add(tfLName,1,2);
```

```
gridPane.add(tGender,0,3);
```

```
gridPane.add(tfGender,1,3);
```

```
gridPane.add(tProgram,0,4);
```

```
gridPane.add(tfProgram,1,4);
```

```
gridPane.add(tNOCredit,0,5);
```

```
gridPane.add(tfNOCredit,1,5);
```

```
gridPane.add(tJYear,0,6);
```

```
gridPane.add(tfJYear,1,6);
```

```
gridPane.add(delete,1,7);
```

```
tfFName.setDisable(true);
```

```
tfLName.setDisable(true);
```

```
tfGender.setDisable(true);
```

```
tfProgram.setDisable(true);
```

```
tfNOCredit.setDisable(true);
```

```
tfJYear.setDisable(true);
```

```
Scene scene = new Scene(gridPane,500,500, Color.BLACK);
```

```
stage.setScene(scene);
```

```
stage.setTitle("Exercise-4 Part-4");
```

```
stage.show();
```

```
read.setOnAction(actionEvent -> {
```

```
    String regNo = tfRegNo.getText();
```

```

try{
    System.out.println("connecting to the data source.....");

    Connection con = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE",
"system", "abc123");

    Statement stmt = con.createStatement();

    ResultSet rs = stmt.executeQuery("Select * from VITStudent where RegNo='"+regNo+"'");

    rs.next();

    tfRegNo.setText(rs.getString(1));
    tfFName.setText(rs.getString(2));
    tfLName.setText(rs.getString(3));
    tfGender.setText(rs.getString(4));
    tfProgram.setText(rs.getString(5));
    tfNOCredit.setText(rs.getString(6));
    tfJYear.setText(rs.getString(7));

    con.close();
}
catch (Exception e){
    System.out.println(e);
}

});

```

```

delete.setOnAction(actionEvent -> {

    String regNo = tfRegNo.getText();

    try{

        System.out.println("connecting to the data source.....");

        Connection con=
DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/CSE","root","harshit");

        Statement stmt = con.createStatement();

        stmt.executeUpdate("delete from vitstudent where regno='"+regNo+"'");
    }
    catch (Exception e){
        System.out.println(e);
    }
});

```

```

        con.close();
    }

    catch (Exception e){
        System.out.println(e);
    }

    tfRegNo.setText(null);
    tfFName.setText(null);
    tfLName.setText(null);
    tfGender.setText(null);
    tfProgram.setText(null);
    tfNOCredit.setText(null);
    tfJYear.setText(null);
});

}

}

```

```

D:\SEM 4\CSE1007>javac -Xlint --module-path javafx-sdk-18\lib --add-modules javafx.controls LabQ4_1.j
va
LabQ4_1.java:51: warning: [rawtypes] found raw type: ChoiceBox
    ChoiceBox programChoiceBox = new ChoiceBox();
    ^
    missing type arguments for generic class ChoiceBox<T>
    where T is a type-variable:
      T extends Object declared in class ChoiceBox
LabQ4_1.java:51: warning: [rawtypes] found raw type: ChoiceBox
    ChoiceBox programChoiceBox = new ChoiceBox();
    ^
    missing type arguments for generic class ChoiceBox<T>
    where T is a type-variable:
      T extends Object declared in class ChoiceBox
LabQ4_1.java:52: warning: [unchecked] unchecked call to addAll(E...) as a member of the raw type Obser
vableList
    programChoiceBox.getItems().addAll("BCE", "BEE", "BME", "BAI", "BCL");
                                ^
    where E is a type-variable:
      E extends Object declared in interface ObservableList
LabQ4_1.java:125: error: incompatible types: Exception cannot be converted to Throwable
        catch (Exception e){
            ^
1 error
3 warnings

```