

**SDM College of Engineering and Technology**

Dhavalagiri , Dharwad-580002. Karnataka State. India.

**Department  
of  
COMPUTER SCIENCE AND ENGINEERING**

**ASSIGNMENT-1**

**[18UCSE508- ADVANCED OBJECT ORIENTED PROGRAMMING]**

**Course Teacher: Prof. Indira R Umarji**



**2022- 2023**

Submitted  
By

**Mr.Vinyas LS**

**2SD20CS125  
5<sup>th</sup> Semester B division**

//JavaFX program to build GUI application for the requirements stated above in the question

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

```
import javafx.event.ActionEvent;
```

```
import javafx.event.EventHandler;
```

```
import javafx.geometry.Insets;
```

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

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

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

```
import javafx.scene.control.Label;
```

```
import javafx.scene.control.PasswordField;
```

```
import javafx.scene.control.TextField;
```

```
import javafx.scene.layout.GridPane;
```

```
import javafx.scene.text.Text;
```

```
import javafx.stage.Stage;
```

```
public class Ass_2_1 extends Application {
```

```
    String username="Vinyas";
```

```
    String password="1234";
```

```
    String checkUser,checkPass;
```

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

```
        // TODO Auto-generated method stub
```

```
        launch(args);
```

```
    }
```

```
    public void start(Stage myStage) throws Exception {
```

```
myStage.setTitle("Login Page");

GridPane gp=new GridPane();

GridPane gp1=new GridPane();


gp.setAlignment(Pos.CENTER);

gp1.setAlignment(Pos.CENTER);

gp.setHgap(10);

gp.setVgap(10);

gp.setPadding(new Insets(20,20,20,20));


Scene scene1=new Scene(gp,500,400);

Scene scene2=new Scene(gp1,500,400);


Text login=new Text("Login Page");

Label un=new Label("User Name : ");

Label pas=new Label("Password : ");

Button submit=new Button("SUBMIT");

TextField tf1=new TextField();

PasswordField p=new PasswordField();

Label suc=new Label("WELCOME TO THE PAGE");

Label fai=new Label();

gp.add(login,1,0);

gp.add(un,0,1);

gp.add(tf1,2,1);

gp.add(pas,0,2);
```

```

gp.add(p,2,2);

gp.add(submit,1,3);

submit.setOnAction(new EventHandler<ActionEvent>() {

    public void handle(ActionEvent e) {

        checkUser=tf1.getText().toString();

        checkPass=p.getText().toString();

        if(checkUser.equals(username)&&checkPass.equals(password)) {

            myStage.setScene(scene2);

            gp1.getChildren().addAll(suc);

        }// END OF IF

        else {

            gp.add(fai, 1, 5);

            fai.setText("Invalid Username or Password");

        }// END OF ELSE

    }// END OF HANDLE METHOD

}); //END OF setOnAction METHOD

myStage.setScene(scene1);

myStage.show();

}

}

```

//JAVAFX application for illustrating MenuItems and SubMenus

```
import javafx.application.Application;
import javafx.scene.Group;
import javafx.scene.Scene;
import javafx.scene.control.Menu;
import javafx.scene.control.MenuBar;
import javafx.scene.control.MenuItem;
import javafx.stage.Stage;

public class menu extends Application{

    public void start(Stage myStage)throws Exception {

        myStage.setTitle("Menu-Example");
        MenuBar m=new MenuBar();
        Group gp=new Group(m);

        Menu men=new Menu("MENU");

        Menu File=new Menu("File");
        MenuItem New=new MenuItem("New");
        MenuItem Open=new MenuItem("Open");
        MenuItem Save=new MenuItem("Save");

        Menu Edit=new Menu("Edit");
        MenuItem Cut=new MenuItem("Cut");
        MenuItem Copy=new MenuItem("Copy");
        MenuItem Paste=new MenuItem("Paste");

        Menu Help=new Menu("Help");
        MenuItem HelpCentre=new MenuItem("Help Centre");
        MenuItem AboutUs=new MenuItem("About Us");

        m.getMenus().add(men);
        men.getItems().addAll(File,Edit,Help);
        File.getItems().addAll(New,Open,Save);
        Edit.getItems().addAll(Cut,Copy,Paste);
        Help.getItems().addAll(HelpCentre,AboutUs);

        Scene scene1=new Scene(gp,500,400);
        myStage.setScene(scene1);
        myStage.show();
    }

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

```

    }

}

//JAVA FX program to build GUI application focusing on Context-Menu

import javafx.application.Application;

import javafx.scene.Scene;

import javafx.scene.control.ContextMenu;

import javafx.scene.control.Label;

import javafx.scene.control.Menu;

import javafx.scene.control.MenuItem;

import javafx.scene.layout.TilePane;

import javafx.stage.Stage;

public class contextMenu extends Application {

    public void start(Stage myStage) {

        myStage.setTitle("Context-Menu Example");

        Label l=new Label("Context-Menu");

        ContextMenu cm=new ContextMenu();

        Menu New=new Menu("New");

        MenuItem File=new MenuItem("File");

        MenuItem Folder=new MenuItem("Folder");

        MenuItem Image=new MenuItem("Image");

        Menu view=new Menu("View");

        MenuItem Large=new MenuItem("Large");

        MenuItem Medium=new MenuItem("Medium");

        MenuItem Small=new MenuItem("Small");
    }
}

```

```
TilePane tp=new TilePane(l);

l.setContextMenu(cm);

Scene scene1=new Scene(tp,500,400);


cm.getItems().add(New);
cm.getItems().add(view);


New.getItems().addAll(File,Folder,Image);
view.getItems().addAll(Large,Medium,Small);


myStage.setScene(scene1);
myStage.show();


}

public static void main(String[] args) {

    // TODO Auto-generated method stub

    launch(args);

}

}
```

```
//Registration form-JAVAFX
```

```
import java.io.FileInputStream;
import java.io.InputStream;
import javafx.application.Application;
import javafx.collections.FXCollections;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Pos;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.CheckBox;
import javafx.scene.control.ChoiceBox;
import javafx.scene.control.DatePicker;
import javafx.scene.control.Label;
import javafx.scene.control.RadioButton;
import javafx.scene.control.TextField;
import javafx.scene.image.Image;
import javafx.scene.image.ImageView;
import javafx.scene.layout.GridPane;
import javafx.scene.shape.Line;
import javafx.scene.text.Font;
import javafx.scene.text.FontWeight;
import javafx.scene.text.Text;
import javafx.stage.Stage;

public class Registration extends Application {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Launch(args);
    }

    public void start(Stage myStage) {
        GridPane gp=new GridPane();
        GridPane gp1=new GridPane();
        gp.setAlignment(Pos.CENTER);
        gp.setHgap(5);
        gp.setVgap(15);
        Scene scene1=new Scene(gp,550,400);
        Scene scene2=new Scene(gp1,500,200);
        myStage.setScene(scene1);

        myStage.setTitle("JavaFX Registration Form");

        Text t=new Text("Employee Registration Form");
        Label name=new Label("Enter Your Name:");
        Label gender =new Label("Select Your Gender:");
        Label dob=new Label("Enter DOB:");
        Label state =new Label("Select Your State:");
        Label qualification=new Label("Select Your Qualification:");

        TextField tf1=new TextField("Enter Your Name");
```



```

RadioButton r1=new RadioButton("male");
RadioButton r2=new RadioButton("Female");

DatePicker d=new DatePicker();

String s[]={"Karnataka","Maharashtra","UttarPradesh","Gujarat"};
ChoiceBox c = new ChoiceBox(FXCollections.observableArrayList(s));

CheckBox cb1=new CheckBox("UG");
CheckBox cb2=new CheckBox("PG");
CheckBox cb3=new CheckBox("PhD");

Button b=new Button("Register");

t.setFont(Font.font("Arial", FontWeight.BOLD, 18));

gp.add(t, 1, 0);
gp.add(name,0,1);
gp.add(gender, 0, 2);
gp.add(dob, 0, 3);
gp.add(state, 0, 4);
gp.add(qualification, 0, 5);
gp.add(tf1, 1, 1);
gp.add(r1, 1, 2);
gp.add(r2, 2, 2);
gp.add(d, 1,3);
gp.add(c, 1, 4);
gp.add(cb1, 1, 5);
gp.add(cb2, 2, 5);
gp.add(cb3, 3, 5);
gp.add(b, 1, 6);

Label regi=new Label("Registration Status");
Label Empregi=new Label("Employee Registration is Successful!!");
Line l=new Line();

regi.setFont(new Font("Arial", 18));
Empregi.setFont(new Font("Arial", 14));
Button OK=new Button("    OK    ");
    b.setOnAction(new EventHandler<ActionEvent>() {
        public void handle(ActionEvent e) {
            myStage.setTitle("Registration
Successful");

            myStage.setScene(scene2);

            gp1.setVgap(30);
            gp1.setAlignment(Pos.CENTER);

            //creating the image object
            try {
                InputStream stream = new
FileInputStream("C:\\Users\\vinyas\\Desktop\\vinyas\\info.png");
                Image image = new Image(stream);

```

```

//Creating the image view
ImageView imageView = new

//Setting image to the image view
imageView.setImage(image);
//Setting the image view

imageView.setX(10);
imageView.setY(10);
imageView.setFitWidth(40);
imageView.setPreserveRatio(true);
gp1.add(imageView,1,0);
} catch(Exception ie) {
    System.out.println(ie);
}

l.setStartX(100.0);
l.setStartY(150.0);
l.setEndX(520.0);
l.setEndY(150.0);

gp1.add(regi,0, 0);
gp1.add(l, 0, 1);
gp1.add(Empregi,0,2);
gp1.add(OK, 1,3);

});
}

myStage.show();
}
}

```