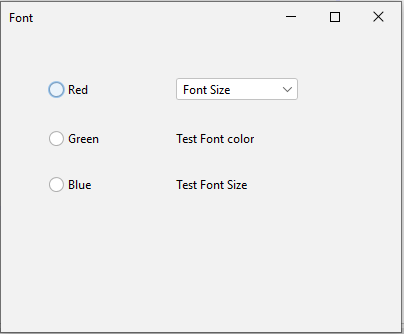
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| **جامعـة العلـوم التطبيقية الخاصة**  **كلية تكنولوجيا المعلومات**  **الواجب الاول 2023-2**    **Student Name: Yazan Jamal Awad**  **Student ID: 202210944**  **□ CS □ SE □ CCC □ DSAI □ Other** | ASU-Logo-small  **Due: 14 may. 2024** | **APPLIED SCIENCE UNIVERSITY (ASU)**  **FACULTY OF INFORMATION TECHNOLOGY (FIT)**  **Assignment 1 2023-2**  **Subject:** *Object Oriented Programming 1301208*  **Instructor:** *I.Baraa Qadoumi* |

**Please Note that this assignment is 2 pages and with a total of 5 points.**

**Question 1:** **[5 points]**

1. You are required to design and develop a JavaFX application. The assignment aims to evaluate specific skills related to use OOP concepts to manipulate JavaFX GUI components. Considering the figures below, you are required to accomplish the following tasks:



* **[1.5 Points]** Design the screen shown above by including the appropriate UI Controls.
* **[1 Points]** Add RadioButton controls to a ***ToggleGroup***.
* **[0.5 Points]** Set the default selected RadioButton to be ***“rdoRED”*** (***with font color RED***).
* **[1 PointS]** For all ***RadioButton*** controls, add a shared event handler called ***“OnFontColorChanged”***. At the ***“OnFontColorChanged”***event handler, add the appropriate code to change the font ***color*** for the appropriate label based on the selected radio button.
* **[1 Point]** For all ***ComboBox*** control, add an event handler called ***“OnFontSizeChanged”*** At the ***“OnFontSizeChanged”***event handler, add the appropriate code to change the font ***size*** for the appropriate label ***("Test Font Size")*** based on the selected item from ComboBox 10,15 or 20.
* Set the stage width and height to be **500 \* 400**.

1. Ensure that the class name for your project is appropriately designated as "Test". Once you have completed the development of the previous application, proceed to copy your code and paste it onto the EduGate platform.

**package ass;**

**import javafx.application.Application;**

**import javafx.event.ActionEvent;**

**import javafx.event.Event;**

**import javafx.event.EventHandler;**

**import javafx.geometry.Insets;**

**import javafx.geometry.Pos;**

**import javafx.scene.Scene;**

**import javafx.scene.control.\*;**

**import javafx.scene.layout.GridPane;**

**import javafx.stage.Stage;**

**/\*\***

**\***

**\* @author Yazan Awad**

**\*/**

**public class Test extends Application {**

**@Override**

**public void start(Stage primaryStage) {**

**RadioButton r1=new RadioButton("Red");**

**RadioButton r2=new RadioButton("Green");**

**RadioButton r3=new RadioButton("Blue");**

**ComboBox c=new ComboBox();**

**c.getItems().addAll(10,15,20);**

**c.setPromptText("Font Size");**

**Label l1=new Label("Test Font Color");**

**Label l2=new Label("Test Font Size");**

**ToggleGroup g=new ToggleGroup();**

**r1.setToggleGroup(g);**

**r2.setToggleGroup(g);**

**r3.setToggleGroup(g);**

**r1.setSelected(true);**

**GridPane root=new GridPane();**

**root.setAlignment(Pos.CENTER);**

**root.add(r1, 0, 0);**

**root.add(c , 1, 0);**

**root.add(r2, 0, 1);**

**root.add(l1, 1, 1);**

**root.add(r3, 0, 2);**

**root.add(l2, 1, 2);**

**root.setHgap(70);**

**root.setVgap(30);**

**Scene s=new Scene(root);**

**primaryStage.setTitle("Font");**

**primaryStage.setHeight(400);**

**primaryStage.setWidth(500);**

**primaryStage.setScene(s);**

**primaryStage.show();**

**r1.setOnAction(OnFontColorChanged->l1.setStyle("-fx-text-fill:red"));**

**r2.setOnAction(OnFontColorChanged->l1.setStyle("-fx-text-fill:green"));**

**r3.setOnAction(OnFontColorChanged->l1.setStyle("-fx-text-fill:blue"));**

**c.setOnAction(new EventHandler() {**

**@Override**

**public void handle(Event OnFontSizeChanged) {**

**int s=(int) c.getValue();**

**l2.setStyle("-fx-font-size:"+s);**

**}**

**});**

**}**

**/\*\***

**\* @param args the command line arguments**

**\*/**

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

**launch(args);**

**}**