

Vježbe 10 - postavljanje i kreiranje projekata *Java Swing* i *JavaFX*

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Stvaranje *Java Swing* projekta

- Kreirati *Java with Ant* tip aplikacije i deselektirati opciju kreiranja glavne klase.
- Kreirati dokument tipa *JFrame* *Form*.
- Koristiti *design* za dizajniranje sučelja a *Source* za implementaciju funkcionalnosti i modela.

The screenshot displays an IDE interface with two main panels. On the left, the 'Source' editor shows the Java code for a class named 'Forma'. The code includes package declarations, imports, and methods for handling button clicks and initializing components. A black arrow points from the 'Forma.java' file in the project tree to the source code editor. On the right, the 'Design' editor shows a visual representation of the GUI. It features a window titled 'Pocetni izgled forme' with a checkbox labeled 'Promjena', four buttons labeled 'Klikni', 'Vrati', 'MijenjaProgress', and 'Preuzmi', and a large empty area below. A tooltip above the design canvas reads: 'To add a component multiple times, select it via click in palette and then Shift-click on design canvas.'

```
public class Forma extends javax.swing.JFrame {
    int pValue = 0;

    public Forma() {
        initComponents();
    }

    @SuppressWarnings("unchecked")
    Generated Code
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
    {
        if(!this.jCheckBox1.isSelected())
            this.jLabel1.setText("Gumb je pritisnut!");
        else this.jLabel1.setText("Gumb je pritisnut checkbox selektiran!");
    }

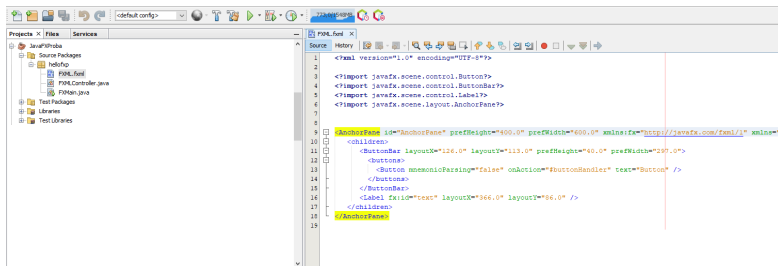
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
    {
        this.jLabel1.setText("Pocetni izgled forme");
        this.jCheckBox1.setSelected(false);
        this.jProgressBar1.setValue(0);
    }
}
```

Stvaranje *JavaFX* projekta

- Skinuti *JavaFX* s poveznice <https://gluonhq.com/products/javafx/>.
- Skinuti i instalirati *SceneBuilder* s poveznice <https://gluonhq.com/products/scene-builder/>.
- Postaviti: tools→options→Java→JavaFX→Scene Builder Home.
- Kreirati globalnu biblioteku: Tools→Libraries→New Libraries→ dodati sve .jar dokumente *JavaFX*-a.
- Kreirati projekt *Java with Ant* i deselektirati opciju kreiranja glavne klase.
- Dodati novo stvorenu globalnu biblioteku u biblioteke projekta pod Compile→Classpath i Run →ModulePath.
- Pod Run →VM Options dodati `--add-modules=javafx.controls,javafx.fxml`.
- U paket dodati novu *JavaFX* glavnu klasu (New→Other→JavaFX→JavaFX Main Class).

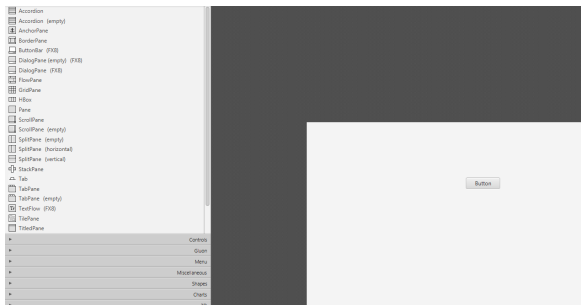
Stvaranje *JavaFX* projekta

- Opcionalno ali korisno (u projekt dodati prazni FXML dokument → omogućava kreiranje grafičkog sučelja korištenjem *SceneBuilder*-a).
- Opcionalno dodati Cascading Style Sheet dokument (omogućava modificiranje stila forme korištenjem CSS-a.)
- Nakon kreiranja sučelja unutar *SceneBuilder*-a nad FXML dokumentom izvršiti naredbu Make Controller.



```
1 <?xml version="1.0" encoding="UTF-8"?>
2
3 <import javafx.scene.control.Button>
4 <import javafx.scene.control.ButtonBar>
5 <import javafx.scene.control.Label?>
6 <import javafx.scene.layout.AnchorPane>
7
8
9 <AnchorPane id="AnchorPane" prefHeight="400.0" prefWidth="600.0" xmlns:fx="http://javafx.com/fxml/1" xmlns=""
10 <children>
11 <ButtonBar layoutX="126.0" layoutY="113.0" prefHeight="40.0" prefWidth="297.0">
12 <buttons>
13 <Button mnemonicParsing="false" onAction="#ButtonHandler" text="Button" />
14 </buttons>
15 </ButtonBar>
16 <Label fx:id="text" layoutX="366.0" layoutY="86.0" />
17 </children>
18 //AnchorPane
19
```

Stvaranje *JavaFX* projekta



```
public class FXMLController implements Initializable {  
  
    @FXML  
    Label text;  
  
    /**  
     * Initializes the controller class.  
     */  
    @Override  
    public void initialize(URL url, ResourceBundle rb) {  
        // TODO  
    }  
  
    @FXML  
    public void buttonHandler(ActionEvent event) {  
        text.setText("Gumb je pritisnut!");  
    }  
}
```

```
public class FXMain extends Application {  
  
    @Override  
    public void start(Stage primaryStage) throws IOException{  
        Parent root = FXMLLoader.load(getClass().getResource("/hellofx/FXML.fxml"));  
  
        Scene scene = new Scene(root);  
        primaryStage.setScene(scene);  
        primaryStage.show();  
    }  
  
    /**  
     * @param args the command line arguments  
     */  
    public static void main(String[] args) {  
        launch(args);  
    }  
}
```