

>Introduction to JavaFX

>Getting Started with JavaFX

<https://openjfx.io/openjfx-docs/>



>Introduction to JavaFX

>Why JavaFX?

<^> Legacy Systems

<^> Intro to Visual Frameworks



>Introduction to JavaFX

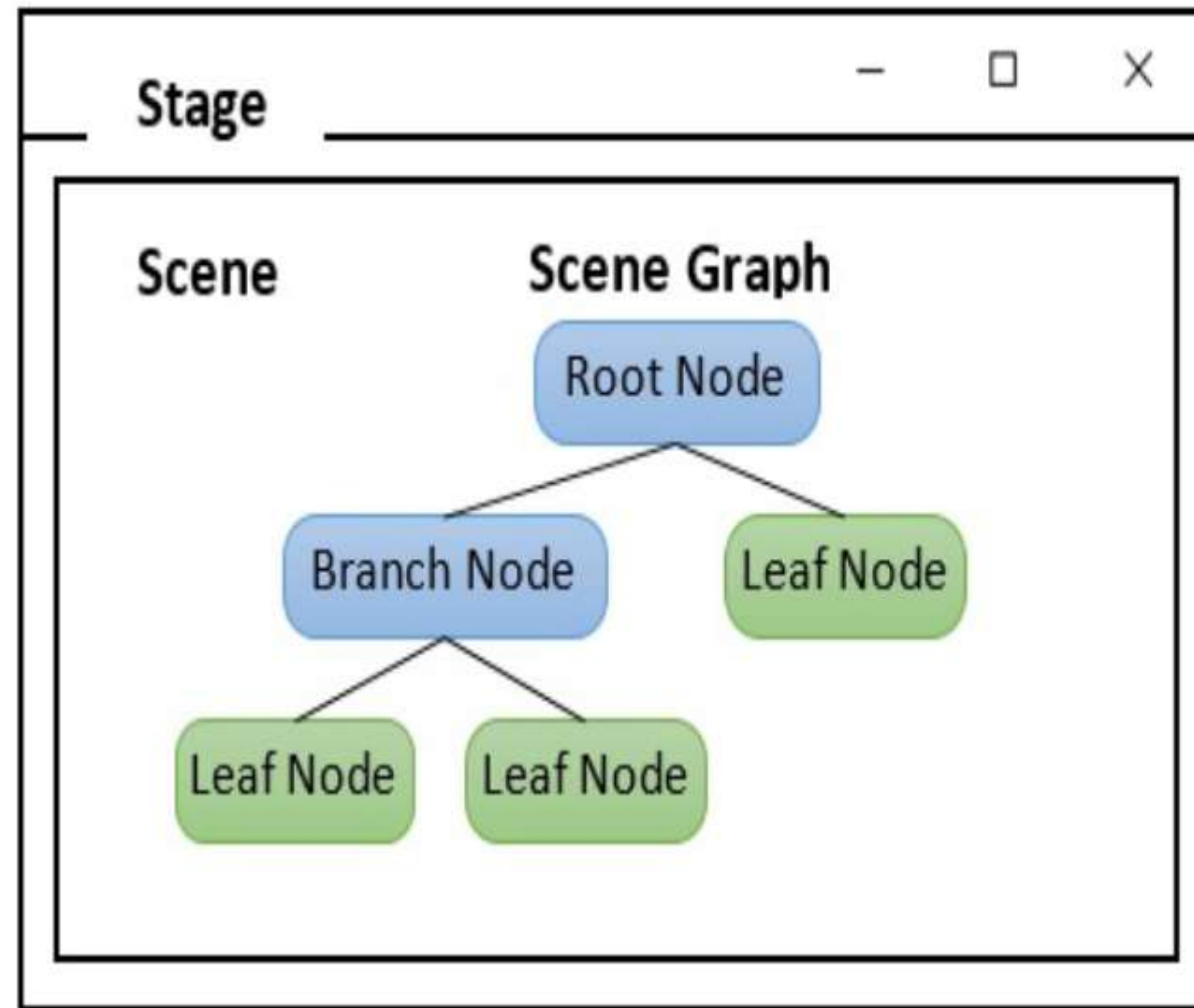
>Key features

- > Rich UI Controls
- > CSS Styling
- > Animations & Transitions
- > Web Integration
- > Touch & Gestures



>Introduction to JavaFX

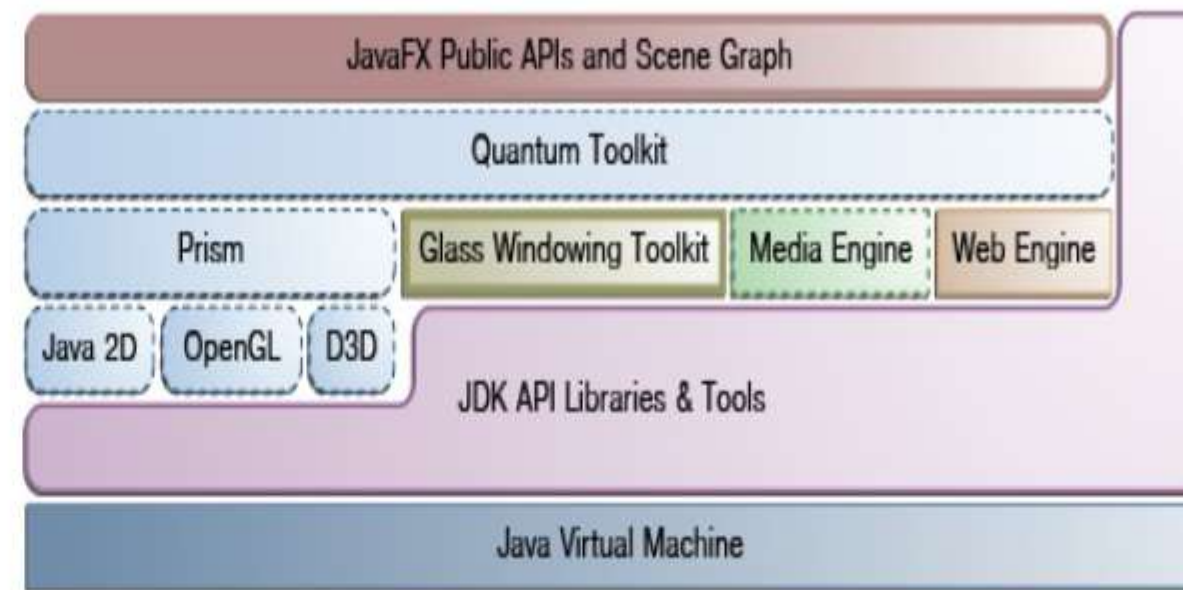
>Architecture



>Introduction to JavaFX

>APIs

- > javafx.animation
- > javafx.application
- > javafx.css
- > javafx.event
- > javafx.geometry
- > javafx.stage
- > javafx.scene



>Manipulating JavaFX GUI components (1)

>Labels

```
// Create a Label object
Label label = new Label("Label");
// Set the font size and style
label.setFont(Font.font("Arial", FontWeight.BOLD, 32));
// Creating the Scene Graph
VBox root = new VBox();
// Adding the Button to the Scene
root.getChildren().addAll(label);
```

Label



>Manipulating JavaFX GUI components (1)

>Buttons

```
Button button = new Button("Click me");  
button.setVisible(false);  
button.setLayoutX(500);  
button.setLayoutY(720);  
button.setFocusTraversable(false);
```



>Manipulating JavaFX GUI components (1)

>Checkboxes

```
CheckBox checkBox = new CheckBox("Check me!");  
checkBox.setVisible(false);  
checkBox.setLayoutX(500);  
checkBox.setLayoutY(720);  
checkBox.setFocusTraversable(false);
```



>Manipulating JavaFX GUI components (1)

>Combo Boxes

```
ComboBox<String> comboBox = new ComboBox<>();  
comboBox.setItems(FXCollections.observableArrayList(  
    "Option 1",  
    "Option 2",  
    "Option 3",  
    "Option 4"  
));  
comboBox.setVisible(false);  
comboBox.setLayoutX(500);  
comboBox.setLayoutY(720);  
comboBox.setFocusTraversable(false);
```



>Manipulating JavaFX GUI components (1)

>Text Fields

```
TextField nameField = new TextField();  
nameField.setVisible(false);  
nameField.setLayoutX(500);  
nameField.setLayoutY(720);
```

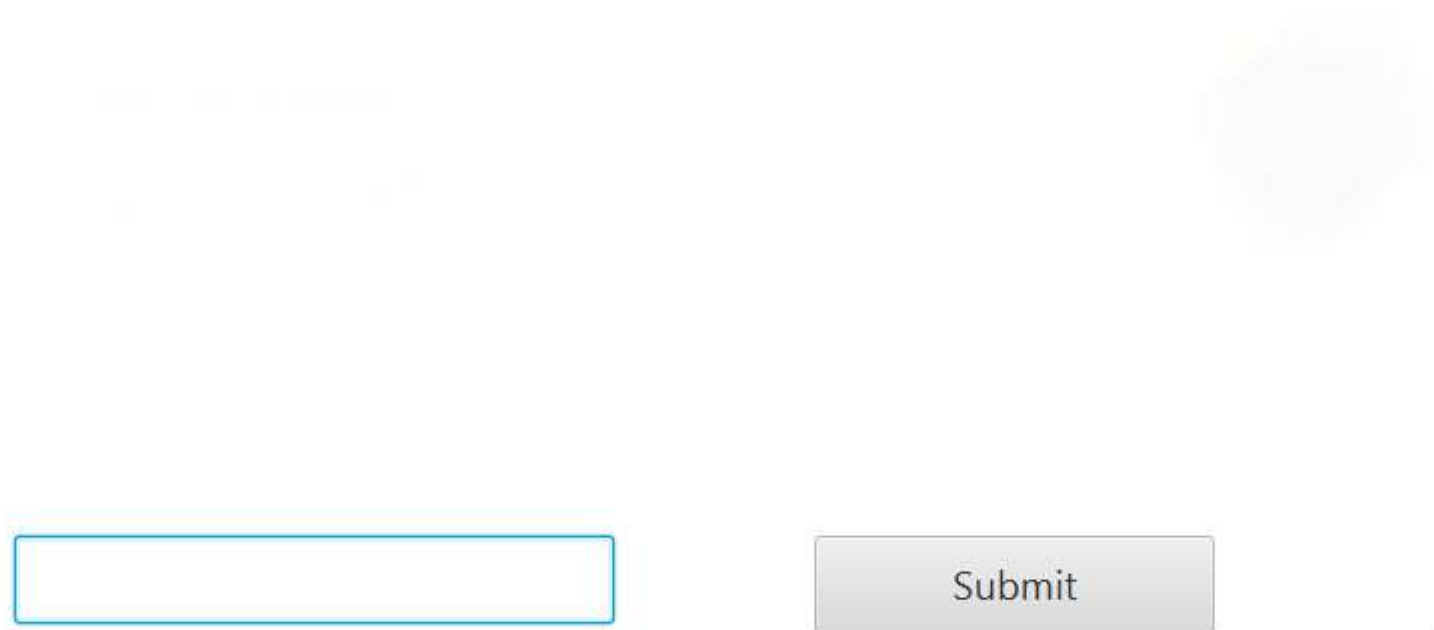
Submit



>Manipulating JavaFX GUI components (1)

>Password Fields

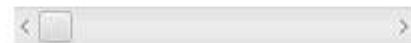
```
PasswordField passwordField = new PasswordField();  
passwordField.setVisible(false);  
passwordField.setLayoutX(500);  
passwordField.setLayoutY(720);
```



>Manipulating JavaFX GUI components (1)

>Scroll Bar

```
ScrollBar scrollbar = new ScrollBar();  
scrollbar.setVisible(false);  
scrollbar.setOrientation(Orientation.VERTICAL);  
scrollbar.setLayoutX(500);  
scrollbar.setLayoutY(720);  
scrollbar.setFocusTraversable(false);
```

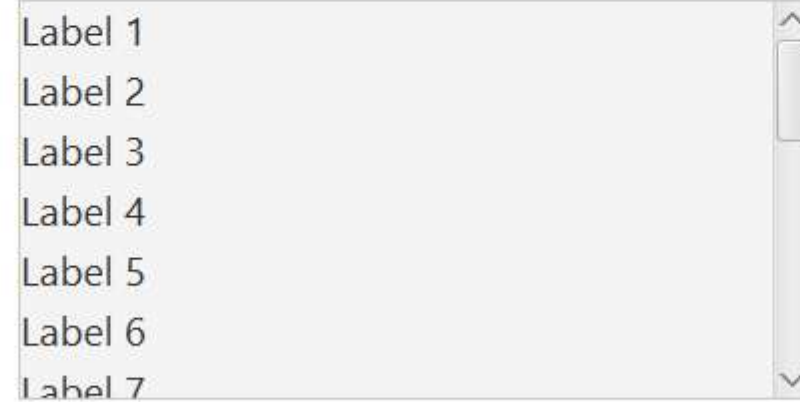


>Manipulating JavaFX GUI components (1)

>Scroll Pane

```
// Create a VBox with some content
VBox content = new VBox();
for (int i = 1; i <= 20; i++) {
    content.getChildren().add(new javafx.scene.control.Label("Label " + i));
}

// Create a ScrollPane and set its content
ScrollPane scrollPane = new ScrollPane();
scrollPane.setContent(content);
scrollPane.setPrefSize(200, 200);
scrollPane.setVisible(false);
scrollPane.setLayoutX(500);
scrollPane.setLayoutY(620);
scrollPane.setFocusTraversable(false);
```



Label 1
Label 2
Label 3
Label 4
Label 5
Label 6
Label 7



>Manipulating JavaFX GUI components (1)

>Separators

```
Slider slider = new Slider(0,100,50);  
slider.setVisible(false);  
slider.setLayoutX(500);  
slider.setLayoutY(720);  
slider.setMajorTickUnit(50);  
slider.setShowTickLabels(true);  
slider.setShowTickMarks(true);  
slider.setFocusTraversable(false);
```



>Manipulating JavaFX GUI components (1)

>Sliders

```
Separator separator = new Separator();  
separator.setVisible(false);  
separator.setOrientation(Orientation.HORIZONTAL);  
separator.setLayoutX(500);  
separator.setLayoutY(720);  
separator.setPrefWidth(1000);  
separator.setStyle("-fx-border-color:#F40306; -fx-border-width:4");
```



The End



> References

> Alot of References

- > <https://docs.oracle.com/javafx/2/architecture/jfxpub-architecture.htm>
- > https://www.tutorialspoint.com/javafx/javafx_application.htm
- > https://docs.oracle.com/javafx/2/css_tutorial/jfxpub-css_tutorial.htm
- > <https://www.youtube.com/watch?v=MqLhU1UrXro>
- > <https://www.youtube.com/watch?v=UaKQHy-WMQ>
- > <http://docs.oracle.com/javase/8/javase-clienttechnologies.htm>
- > <https://www.tutorialspoint.com/javafx/>
- > <http://www.javafx tutorials.com/>

