

The background of the slide is a reproduction of a painting, likely Vincent van Gogh's 'Olive Trees with Yellow Sky and Sea'. It depicts a landscape with several large, gnarled olive trees in the foreground and middle ground. The ground is a mix of yellow and brown tones, suggesting a dry, hilly terrain. In the distance, there are blue mountains under a bright, yellow sky. The overall style is characteristic of Impressionism, with visible brushstrokes and a vibrant color palette.

X01 JavaFX 1

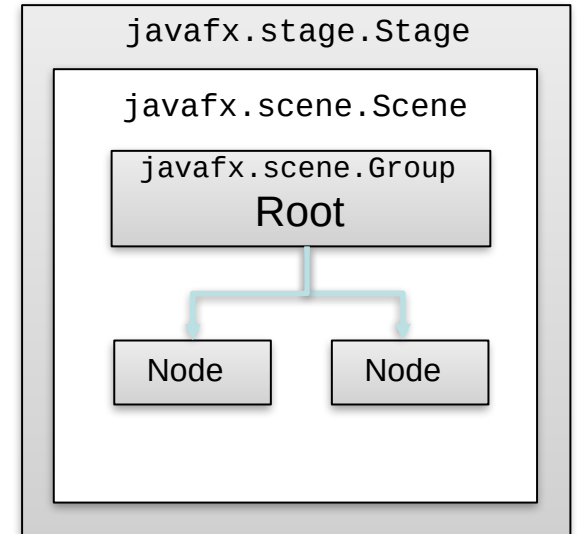
Introduction to JavaFX

JavaFX

- Designed for rich client applications
 - Graphics, UI's, video, audio, etc.
- Replaces Swing
- JavaFX HelloWorld

JavaFX

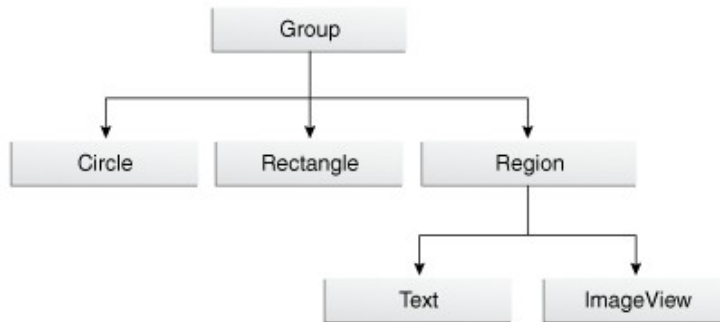
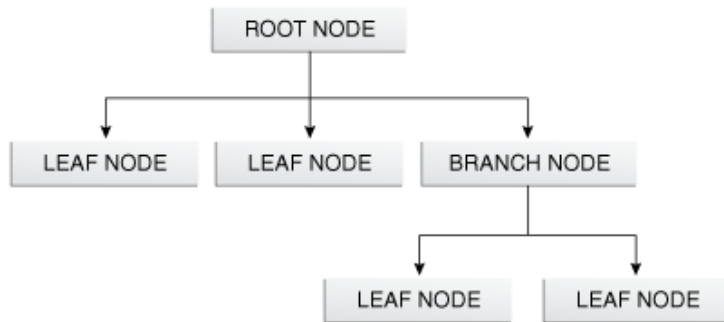
- Extend `javafx.application.Application`
 - Override the `start()` method
- Stage: the window
- Scene: container for a scene graph
- Node: object or group of objects in scene
- Pane: organizer of nodes in scene graph:
FlowPane, TilePane, GridPane, HBox, VBox, etc.



Java FX Scene Graph

Tree of nodes, with a single 'branch' at the root

- **branch** (may have children e.g. Group, Region)
- **leaf** (may not have children e.g. Rectangle, Circle)



Copyright Oracle (<http://docs.oracle.com/javafx/2/scenegraph/jfxpub-scenegraph.htm>)

Nodes and Properties

Can set node properties programmatically:

```
Text message = new Text("Hello");  
message.setFont(Font.font("Tahoma", FontWeight.NORMAL, 40));  
message.setFill(Color.RED);
```

or declaratively using FXML / CSS:

```
#text {  
    -fx-font-family: Tahoma, sans-serif;  
    -fx-font-style: normal;  
    -fx-font-size: 40;  
    -fx-fill: red;  
}
```