

GroovyFX

or

How to Program JavaFX Easily

Prof Russel Winder

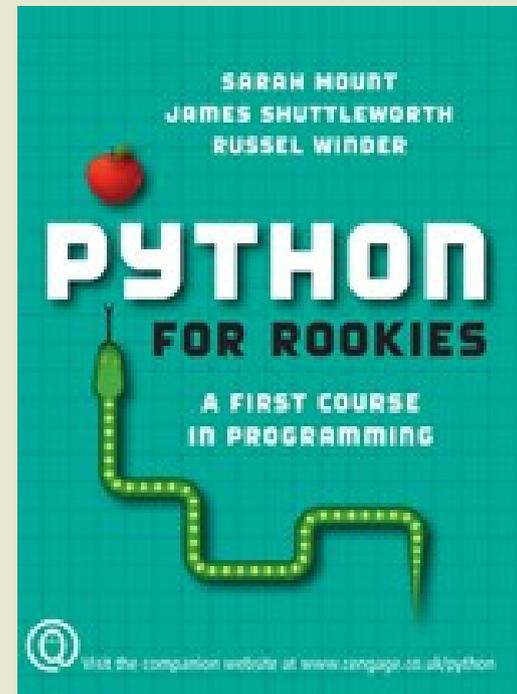
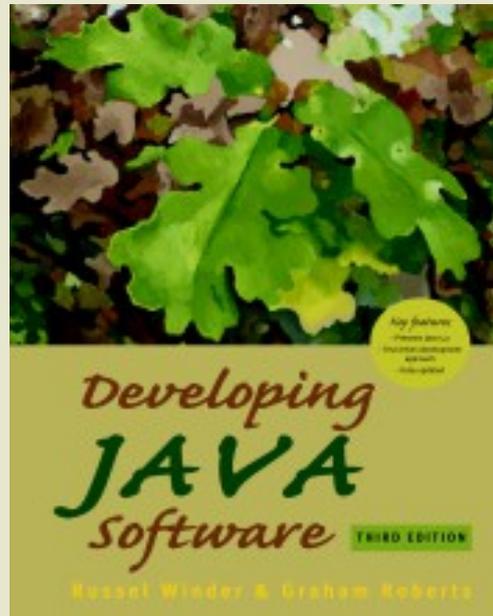
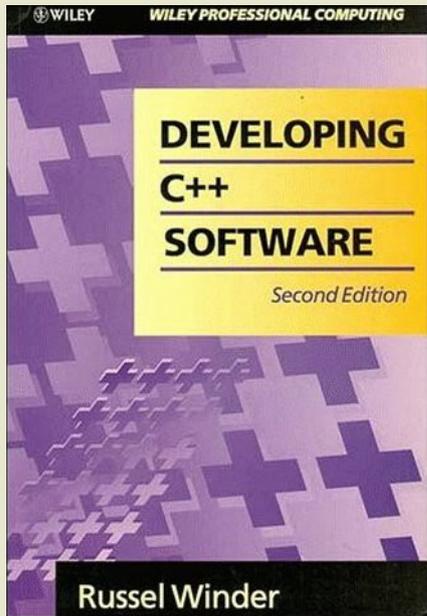
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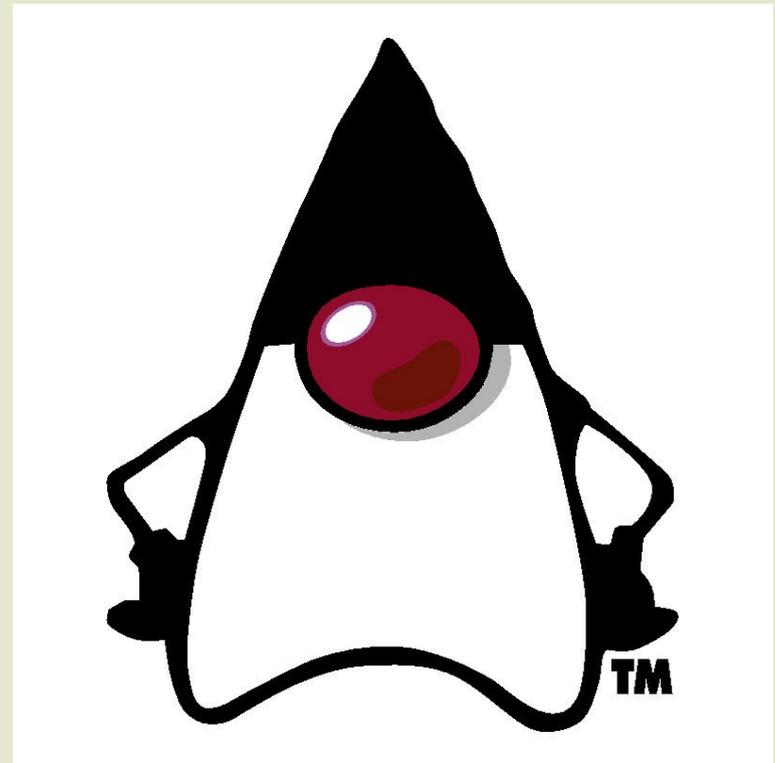
Interstitial Advertisement

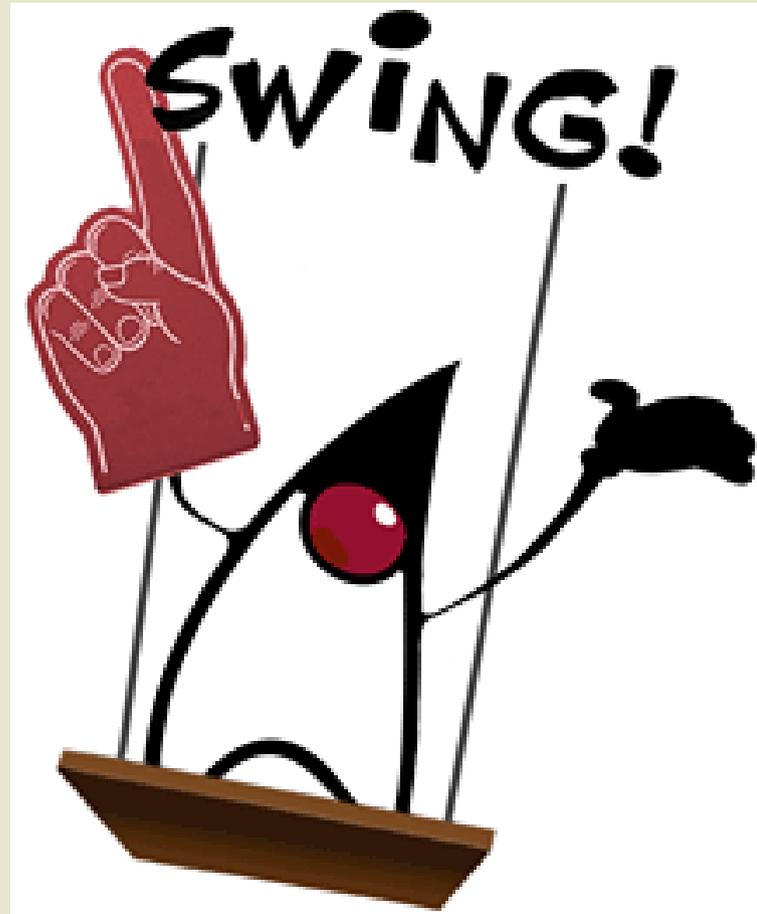


Java

AWT

Applets





Interregnum

Java server-side only



Flex

Silverlight



JavaFX



JavaFX Script

```
import javafx.stage.Stage;
import javafx.scene.Scene;
import javafx.scene.text.Font;
import javafx.scene.text.Text;
```

```
Stage {
  title: "Hello World"
  width: 250
  height: 80
  scene: Scene {
    content: Text {
      font: Font {
        size: 24
      }
      x: 10, y: 30
      content: "Hello World."
    }
  }
}
```

http://en.wikipedia.org/wiki/JavaFX_Script

Historical Context

- JavaFX
 - RIA framework
 - JavaME
 - JavaSE
 - JavaFX Script
- Compete against:
 - Flex
 - Silverlight

JavaFX didn't really catch on...

...despite JavaFX Script.



Graphics Frameworks

- GTK, GObject:
 - Glade
- Qt:
 - Qt Designer
 - Qt Quick/QML
- wxWidgets:
 - wxGlade

The New JavaFX

- JavaFX 2:
 - Java API for Java SE.
 - Eventually a replacement for Swing.
- SceneBuilder
- FXML

JavaFX == JavaFX 2

```
import javafx.application.Application;
import javafx.scene.Group;
import javafx.scene.Scene;
import javafx.stage.Stage;
import javafx.scene.paint.Color;
import javafx.scene.text.Font;
import javafx.scene.text.Text;

public class HelloWorld extends Application {
    @Override
    public void start(final Stage stage) {
        stage.setTitle("Hello World");
        final Group rootNode = new Group();
        final Text textNode = new Text(10, 30, "Hello World.");
        textNode.setFont(Font.font("Ocean Sans MT", 24));
        rootNode.getChildren().add(textNode);
        final Scene sceneNode = new Scene(rootNode, 250, 80);
        sceneNode.setFill(Color.web("#d0c4b0"));
        stage.setScene(sceneNode);
        stage.show();
    }

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

No JavaFX Script

Groovy



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GroovyFX

```
import static groovyfx.javafx.GroovyFX.start
```

```
import javafx.scene.paint.Color
```

```
start {  
    stage title: 'Hello World', visible: true, {  
        scene width: 250, height: 80, fill: Color.web('#d0c4b0'), {  
            text x: 10, y: 30, text: 'Hello World.', font: '24pt "Ocean Sans MT"'  
        }  
    }  
}
```

Real Code



<http://nighthacking.com>

Having Good Architectures

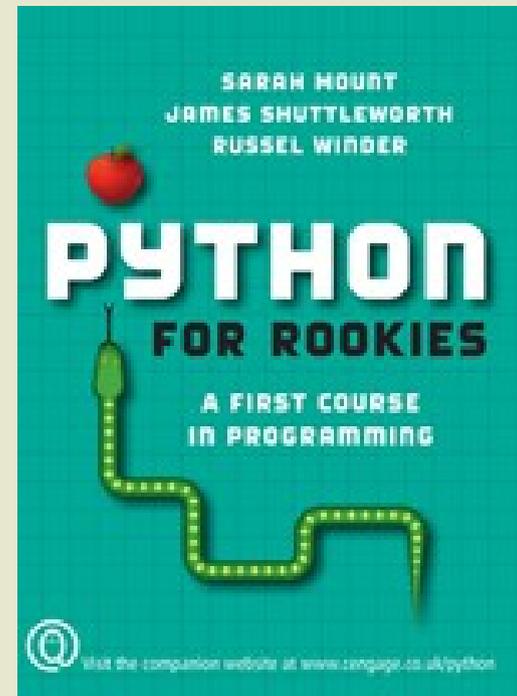
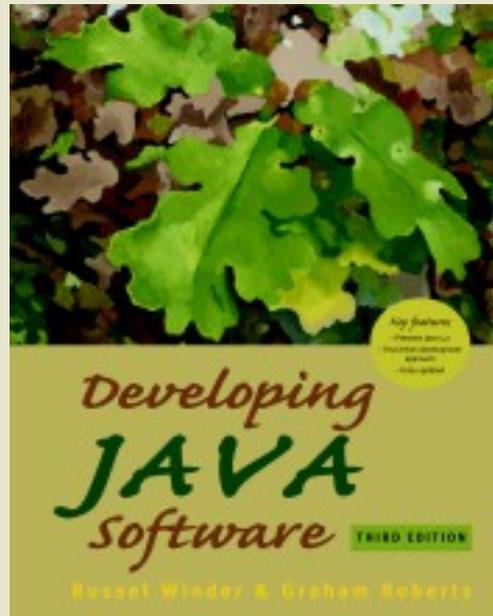
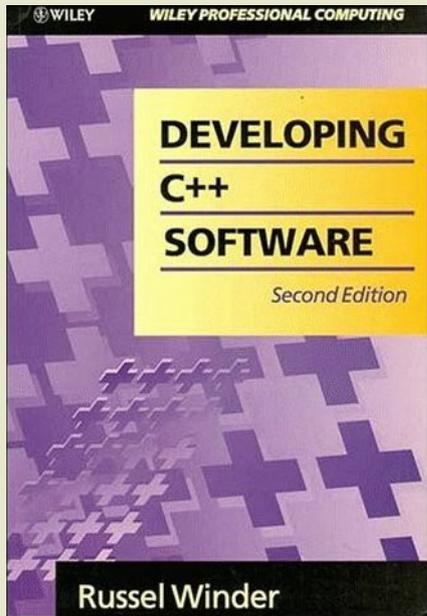
- Separate concerns.
- MVC (model, view controller), MVP (model view presenter).
- Mediator.
- Façade.
- Code for structure and logic.
- CSS (cascading style sheets) for presentation.

More code...



<http://griffon.codehaus.org/>

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