

# From Inkscape to JavaFX



INKSCAPE

Using the JavaFX production suite

# Goals

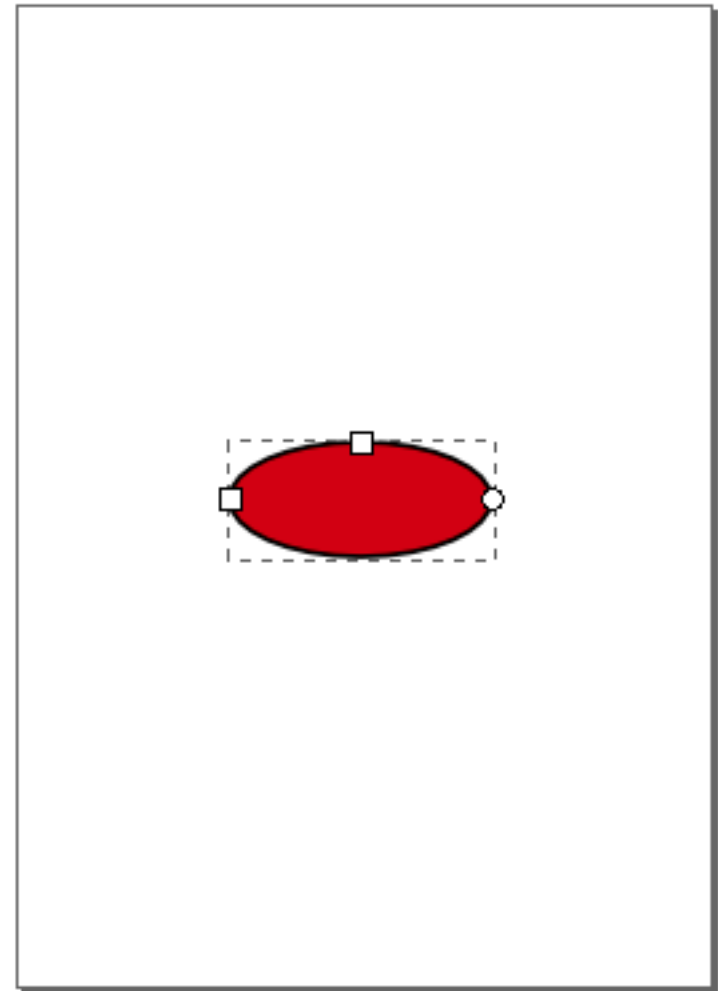
- Show how to use Inkscape to draw a picture and then use JavaFX to make it interactive
  - Why? Because designers can use a design tool such as Inkscape to do appealing designs. Programmers can use JavaFX to do appealing interactivity.

# Assumptions

- You have
  - Installed Inkscape
    - <http://www.inkscape.org/>
  - Installed Netbeans with JavaFX
    - <http://netbeans.org/>
  - Installed JavaFX Production Suite
    - <http://javafx.com/>

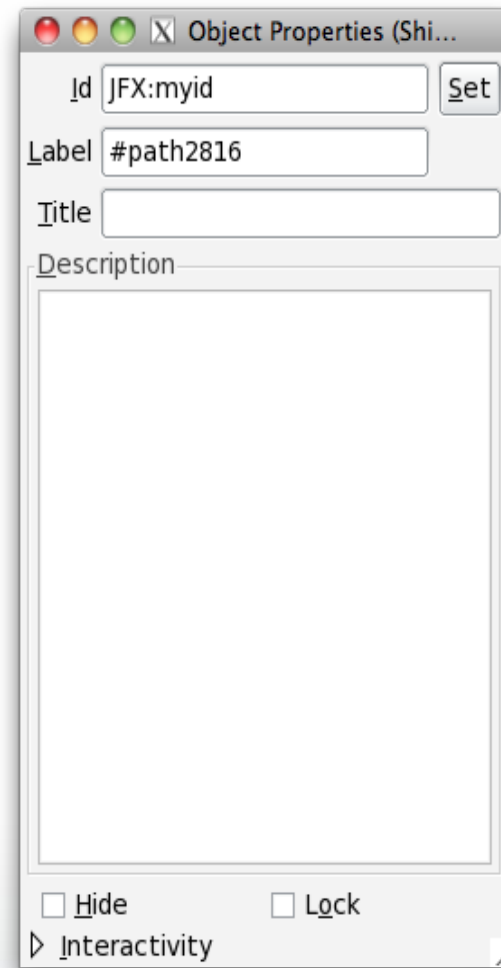
# Create the Drawing

- Use Inkscape to draw an ellipse as shown here
- Then fit page to selection
  - Use File->Document properties



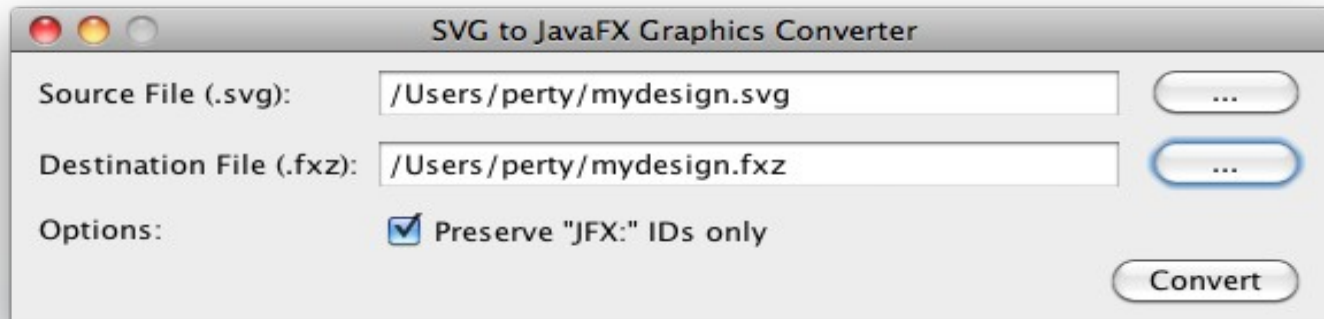
# Identify the Object

- To manipulate an object in your program, you need to agree with the designer on an identity for it.
  - Right-click and select object properties
  - Set the id as seen here



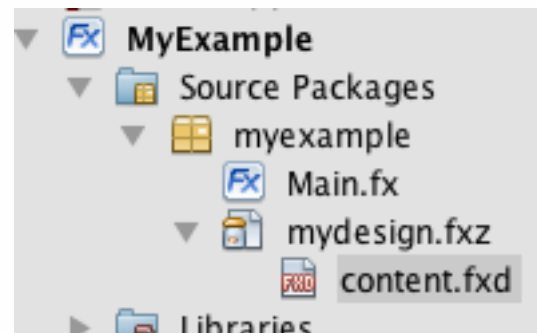
# Use the SVG Converter

- Save the drawing in SVG format
- Start the SVG Converter of the Production Suite
- Select input and output files. Press Convert.



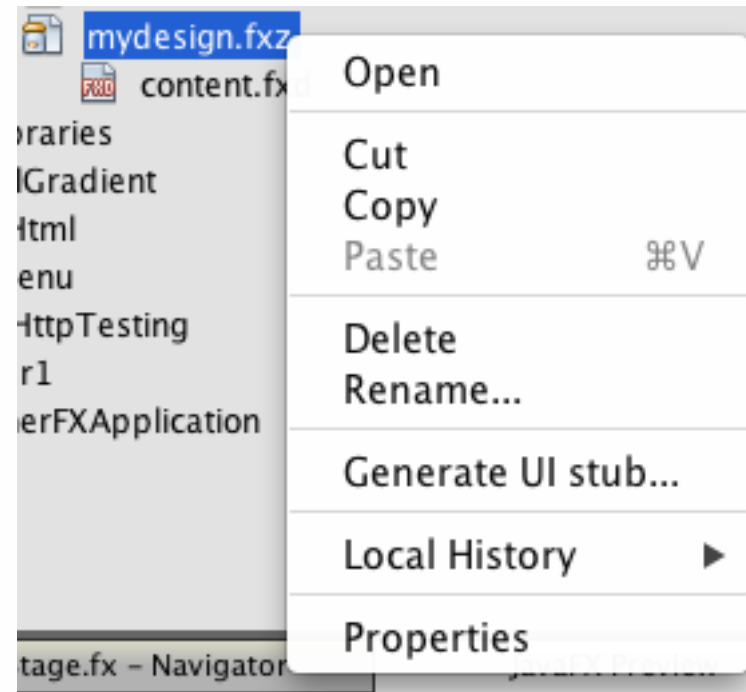
# Over to Netbeans

- Create a new JavaFX project in Netbeans
- Copy the fxz-file from the converter to your package



# Create an UI stub

- An adapter that connects to the design
- Right-click and select "Generate UI stub..."
- A class is generated that loads the design
- Use it!





# Use the Design

- The preview should show the design now

```
package myexample;

import javafx.stage.Stage;
import javafx.scene.Scene;

var theDesign = mydesignUI {
}

Stage {
  title: "Application title"
  scene: Scene {
    width: 400
    height: 400
    content: [
      theDesign
    ]
  }
}
```

# Add Interaction

- Add a slider
- Connect slider to the position of the design
- We use a trigger on an intermediate variable to do the trick

```
var slider = Slider {  
    min: 1  
    max: 100  
    vertical: true  
}  
  
var posY = bind slider.value on replace {  
    theDesign.myid.translateY = posY  
}  
  
Stage {  
    title: "Application title"  
    scene: Scene {  
        width: 400  
        height: 400  
        content: [  
            theDesign,  
            slider  
        ]  
    }  
}
```

# More Examples

- The Production Suite comes with examples



# Same Game – Different Artwork

Figure 4 shows artwork in Adobe Illustrator that could be substituted.



Figure 4 shows artwork in Adobe Illustrator that could be substituted:

# Challenge

- Do a drawing with different objects. Let the program control their visibility, opacity or some other aspect.
- Make something of the picture here.

