Demo
Yuri Strot; exyte

- 2005 - Eclipse User
- 2006 - Eclipse Developer
- 2008 - Eclipse Committer
- Worked with:
  - Cisco
  - Xored
  - BT
  - COBOL-IT
  - Instantiations
Igor Zapletnev; Scade

Platform for mobile app development

- EMF modeling
- SVG rendering
- Data binding
- Multi-language
- Native widgets
Competitors: Xamarin
Competitors: PhoneGap
Competitors: Qt
Why we chose Eclipse?

+ Modeling tools: EMF, OCL, Compare, Validation, etc.
+ Any language: Xtext
+ Open source, EPL
+ Ecosystem
+ Graphical tools: SWT, GEF, GMF, Batik
+ Data binding
Before
After
How we did it?

- EMF
- GEF
- Data Binding
- Xtext
- **Sweet**
- Sweet + e4
What is Sweet?

- SWT and EMF based modern widget toolkit
- Vector graphics support
- Declarative description
- Advanced styling capabilities
- Animation
Label label = WidgetsFactory.eINSTANCE.createLabel();
label.setText("Hello World!");
SweetControl control = new SweetControl(parent, label);
Sweet Scene

```java
Shape shape = SceneFactory.eINSTANCE.createShape();
shape.setForm(Geom2d.rect(10, 10, 100, 100));
shape.setFill(Colors.of(0xffa500));
SweetControl control = new SweetControl(parent, shape);
```
Styling

Button button = WidgetsFactory.eINSTANCE.createButton();
button.setText("Click me");
SweetControl control = new SweetControl(parent, button);

+ button.setSwtType("Link")
+ applyStyles(button)

Click me  Click me  Click me
import widgets
import layout

Panel {
  layout: Grid(3); margin: 10
  Label  { text: "Project name:" }
  TextBox { fill-x: true; span-x: 2 }
  Toggle { text: "Use default location"; on: true; span-x: 3 }
  Label  { text: "Location:" }
  TextBox { text: "/Users/ystrot/ws"; enable: false; fill-x: true }
  Button { text: "Browse..." }
}
What we built with Sweet?

- Demo
How we did it?

- EMF
- GEF
- Data Binding
- Xtext
- Sweet
- **Sweet + e4**
e4 is awesome

- Model-based user interface
- Pluggable renderers
- CSS-based styling
- Dependency injection
- Event model

BUT is it enough to compete with Qt / WPF / Web?
e4 + SWT

+ Native look&feel
+ Old plugins works gracefully
- Poor CSS support
- Verbose custom rendering
  (CTabRendering: 1000+ lines)
e4 + JavaFX

+ Powerful CSS support
± Old plugins: SWT on JavaFX
- No native look&feel
e4 + Sweet

+ Native look&feel
+ Powerful styling
+ Old plugins works gracefully
Live Editing
Demo
Thanks!

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http://exyte.github.io/sweet.eclipse/