Single Sourcing for
SWT, RAP, JavaFX and GWT
with Eclipse 4 and Wazaabi

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Speakers

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Agenda

- Why Wazaabi?
- What is Wazaabi?
- Demo (creation of a form using Wazaabi tools)
- Integration with Eclipse 4
- Demo (creation of an e4 RCP app with Wazaabi)
- Rendering engines for various platforms
- Demo (RAP, SWT, JavaFX, GWT)
- Roadmap
Why Wazaabi?

To model the UI:

- Not to dilute UI structure in the code
- Compare versions
- Maintenance
- Documentation
What is Wazaabi

- Live UI model (EMF)
- Rendering engine
- Declarative data binding
- Tools to create models
UI Meta-Models

● Core model
  ○ common components (label, button, text field, check box, radio button, etc.)
  ○ common styles (color, font, border, simple layouts, etc.)

● Specific platform models
  ○ layouts
  ○ specific components
  ○ specific styles
Rendering Engine

UI models can be rendered live on various platforms:

- SWT - full support, including Eclipse Forms UI
- RAP - few restrictions
- JavaFX - prototype
- GWT - prototype
Data Binding & Event Handling

- Properties of UI components can be bound to fields in business model
  - Declarative
  - Live
- Event Handling
  - By default in Java
  - Can be in any JVM language (Groovy, Scala, Clojure)
  - And even in JavaScript
Wazaabi Tools

- Tree Editor (ready to be used)
- DSL (proprietary versions exist)
- WYSIWYG editor (in progress)

Why do we need special tools?

- Reduce the distance between design and runtime (immediate rendering of the model)
- Rapid prototyping (together with end user)
- Reduce the time: 1 sec per form (using automatic creation of draft UI based on domain model)
Wazaabi Tools
When to use Wazaabi?

● Use Wazaabi
  ○ To create a lot of forms
  ○ Write once the UI, run on various platforms
  ○ When your developers are not high skilled

● Do not use Wazaabi
  ○ To create complex UIs that require all power of a UI framework (extend Wazaabi instead)
Demo

Creation of a form using Wazaabi tools
Integration with E4

- Continuation of live workbench model
- Integration with e4 mechanism
Demo

Creation of an e4 app with a Wazaabi form
Rendering Engines

- SWT fully supported
- JavaFX, currently in prototype, can be fully supported (looking for sponsors...)
- GWT, currently in prototype, need some refactoring (reflexion ....)
Demo

Single form rendered with SWT, JavaFX, GWT
Roadmap

- Release in Eclipse
- WYSIWYG editor
- Android rendering engine
- Vaadin rendering engine
- Improvement of tools
- RAP based editor
- Documentation
- JSON domain models
Try it!

www.eclipse.org/wazaabi
Questions
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