

Java and JSF JSF Has Never Been Just about Markup

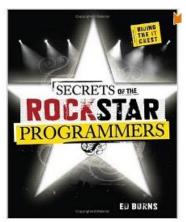
@edburns
JavaEE UI Technical Lead



Speaker Credentials

- JSF Spec Lead since 2002
- Author of two books









Latin America 2011

Tokyo 2012

April 4-6, 2012



The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



- I thought JSF components were just tags?
- The design pedigree of JSF
- The idea behind JavaJSF
- The JavaJSF developer experience
- DEMO
- The afore mentioned JSF Tweaks
- Roadmap





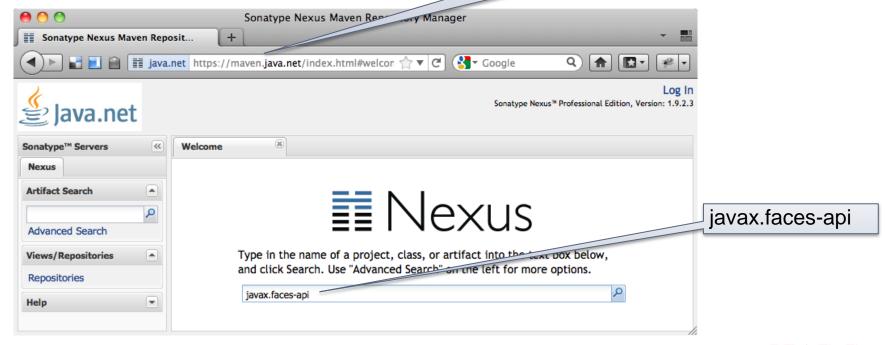
Think again

- The basic artifact in JSF is a Java class javax.faces.component.UIComponent
- JSF was designed to allow completely arbitrary ways of expressing how a bunch of things that extend from UIComponent make up a user interface
- Two standard View Declaration Languages in JSF: Facelets and JSP



Think again

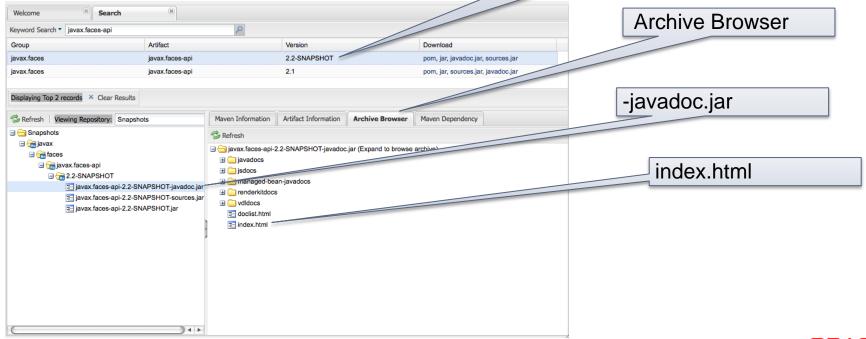
• Let's take a look at the API http://maven.java.net





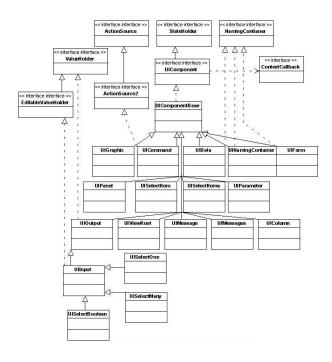
Think again

• Let's take a look at the API 2.2-SNAPSHOT



Think again

Let's take a look at the API





<< interface interface >> << interface interface >> << interface interface >> I Thou ActionSource StateHolder **NamingContianer** ΔΔΔ << interface interface >> Think ag ValueHolder << interface >> << interface interface >> ContextCallback **UIComponent** << interface interface >> ActionSource2 Let's tal UI ComponentBase **UIGraphic UI Command UIData** UINamingContainer UlForm **UIPanel** UISelectitem **UISelectitems** UIParameter UlOutput UIMessage **UIMessages UI ViewRoot UIColumn** UISelectOne Ulinput UISelectManv UISelectBoolean

Just Tags?



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The Design Pedigree of JSF

OxCAFEBABE

Amy Fowler



Hans Bergsten



In other words, the people that brought you swing



The Design Pedigree of JSF

0xBABB1E

Craig McClanahan



In other words, the struts guy



The Design Pedigree of JSF

Break it down

- Swing-like Java API
 - Components
 - Properties
 - Methods
 - Events and Listeners
- Struts like authoring experience
 - For a web framework, this turned out to be more popular.
 - Markup is an easier way to declare a UI



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The Idea Behind JavaJSF

Take the popularity of Vaadin and use it to talk about JSF

- This talk is a SNAPSHOT result of an in-progress experiment
- Hypothesis
 - It should be possible to, with just small extensions to core JSF,
 make a very Vaadin-like authoring experience
 - If true, lots of power could be made available to developers with little new code



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The JavaJSF Developer Experience

Taken entirely from Vaadin + JSF

- Extend some base "Application" class
- Build the UI in the init() method
- Use event listeners to manipulate the UI dynamically



The JavaJSF Developer Experience

Getting the software

- Install Mojarra 2.2.0-SNAPSHOT into GlassFish 3.1 or later
- Use this archetype

mvn archetype:generate -DarchetypeGroupId=com.sun.faces -DarchetypeArtifactId=hellojavajsf-archetype

- -DarchetypeVersion=0.1-SNAPSHOT
- -DarchetypeRepository=https://maven.java.net/content/repositories/snapshots/



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DEMO





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The Afore Mentioned JSF Tweaks

Look at my recent commits to Mojarra

- With https://svn.java.net/svn/mojarra~svn/trunk> do
- svn log -r {2011-09-15}:{2011-10-07} | egrep -A 2 'r[0-9]+ \| edburns \|'
 - r9381 Expose FaceletFactory and a wrapper for same http://java.net/jira/browse/JAVASERVERFACES SPEC PUBLIC-611
 - r9398 Make it easier to instantiate a composite component from java http://java.net/jira/browse/JAVASERVERFACES_SPEC_PUBLIC-599
 - r9400 Annotation for ResourceResolver http://java.net/jira/browse/JAVASERVERFACES SPEC PUBLIC-1038



The Afore Mentioned JSF Tweaks

Oh, and the existing com.sun.faces.spi

- Annotation scanner SPI in GlassFish 3.0, 3.1, 3.1.1
- maven.java.net

```
<dependency>
 <groupId>com.sun.faces</groupId>
 <artifactId>jsf-spi</artifactId>
 <version>1.0-SNAPSHOT</version>
</dependency>
```

com.sun.faces.spi.InjectionProvider



The Afore Mentioned JSF Tweaks

Key enablers already in JSF

- Facelets
- Composite Components
- Facets
 - Maps to things like Window.getContent()
- Existing Third Party Component Ecosystem



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Roadmap for JavaJSF



- Uses JSF 2.2 APIs
 http://weblogs.java.net/blog/edburns/archive/2011/09/26/try-out-mojarra-220-snapshot
- Entirely depends on interest
- Source being developed at https://svn.java.net/svn/jsf-extensions~svn/trunk/code/run-time/javajsf
- 0.1-SNAPSHOT out now
 - Including Maven Archetype



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Q&A



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