



Creating An IDE For Your Own Web Framework

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Some Context...

**TIME
FOR A
DEMO!**

(What?! Already a demo?)

Agenda

- Needs Analysis
- Example: Wicket
 - > Wicket-specific IDE features
 - > General IDE features
 - > Distribution model
- Demo:
 - > Wicket IDE in action (Geertjan)
 - > Exploring under the hood (Petr)
 - > Beginning to create your own IDE (Geertjan)
- Questions and answers

Needs Analysis: Why Tooling?

- Needs: productivity and usability
 - > Generate heaps of useful code
 - > Be able to type code quickly and efficiently
- Solutions:
 - > Wizards for setting up a project
 - > Wizards for creating files
 - > Drag and drop code snippets
 - > Extending the editor for framework-specific syntax
 - > Samples

Example: Wicket

- Aims of the web framework
 - > Separation of concerns
 - > Component development for the web
 - > Reusable components
 - > No XML configuration files
- Distinguishing features
 - > Web page/component = HTML file + Java file
 - > Wicket ID connection between the two files
 - > The two files have the same name
 - > They're in the same source structure

Home.java

```
package com.myapp.wicket;  
  
import wicket.markup.html.basic.Label;  
  
public class Home extends WebPage {  
  
    public Home() {  
  
        add(new Label("message1", "Hello World!"));  
  
    }  
}
```

Home.html

```
<html>  
  <head>  
    <title></title>  
    <link rel='stylesheet' type='text/css' href='style.css'/>  
  </head>  
  <body>  
  
    <span wicket:id="message1">this text will be replaced</span>  
  
  </body>  
</html>
```

web.xml

```
<servlet>
  <servlet-name>WicketApplication</servlet-name>
  <servlet-class>wicket.protocol.http.WicketServlet</servlet-class>
  <init-param>
    <param-name>applicationClassName</param-name>
    <param-value>com.myapp.wicket.WicketApplication</param-value>
  </init-param>
</servlet>
<servlet-mapping>
  <servlet-name>WicketApplication</servlet-name>
  <url-pattern>/wicket</url-pattern>
</servlet-mapping>
```


WicketApplication.java

```
package com.myapp.wicket;

import wicket.protocol.http.WebApplication;

public class WicketApplication extends WebApplication {

    public WicketApplication() {

        getPages().setHomePage(Home.class);

    }
}
```

Wicket-Specific IDE Functionality

- Productivity: Setup and code generation
 - > Attach Wicket JARs to application
 - > Create useful source structure
 - > File templates for common artifacts
 - > Drag and drop of Wicket components
 - > Project samples
- Usability: Editor Extension
 - > Keep the Java file and HTML file synchronized
 - > Rename and move them together
 - > Keep the Wicket ID synchronized
 - > If conflict, show error and offer a suggestion of how to solve
 - > Navigation between the two files

Generic IDE Functionality

- > Code completion in Java file and HTML file
- > Deployment to multiple servers
- > Set the browser, proxy server, proxy port
- > Syntax highlighting of Java file and HTML file
- > Debugger, stepping through the code
- > Profiler for finding bottlenecks
- > Java EE 5 extensibility
- > Code templates
- > Chat sessions with other Wicket users
- > Samples, JavaHelp, other documentation
- > And much more...

Distribution

- > Executable for launching the editor
- > ZIP distribution
- > Webstartable application
- > Provide updates when new features are implemented

Branding

- > Splash screen
- > Icons

Wicket IDE Demo

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Exploring Under the Hood

Petr Pisl

Getting Started

1. Quick demo.
2. Reusing NetBeans modules.
3. Adding your own modules.
4. Adding other people's modules.

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Next steps...

- 1. Learn.**
- 2. Contribute.**
- 3. Keep in touch.**

You can learn...



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- > [NetBeans API Javadoc](#)
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 - [Sandip Chitale](#)
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The following tutorials provide step-by-step instructions on how the NetBeans Platform. Most of the tutorials below apply specifically to NetBeans IDE 4.1 too.

Don't forget to also check the on-line help in the IDE itself, available

Please note that the following tutorials are specifically for developing plug-in modules for extending NetBeans **and Articles**.

Quick Starts (i.e., Starting Points for Complete Beginners)

The following quick starts introduce you to the facilities offered for writing NetBeans plug-in modules. The aim of these quick starts

- [Rich-Client Application Quick Start Guide](#). A brief introduction on the screen and save the results. The initial version is for a simple application.
- [Plug-in Module Quick Start Guide](#). A quick start tutorial for how to create and install a very simple NetBeans module

RCP Tutorials

The following tutorial introduces you to the facilities offered by the

- [HTML Editor Tutorial](#). A tutorial that shows you how to build
- [FeedReader Tutorial](#). A NetBeans Platform sample and tutorial

You can contribute...

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You can keep in touch...

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Two messages to take with you...

**Creating you own app on the
NetBeans Platform is not
rocket science.**

**Creating support for a new
web framework is not brain
surgery.**

Questions & Answers

