

jMaki Web 2.0 Applications Made Easier

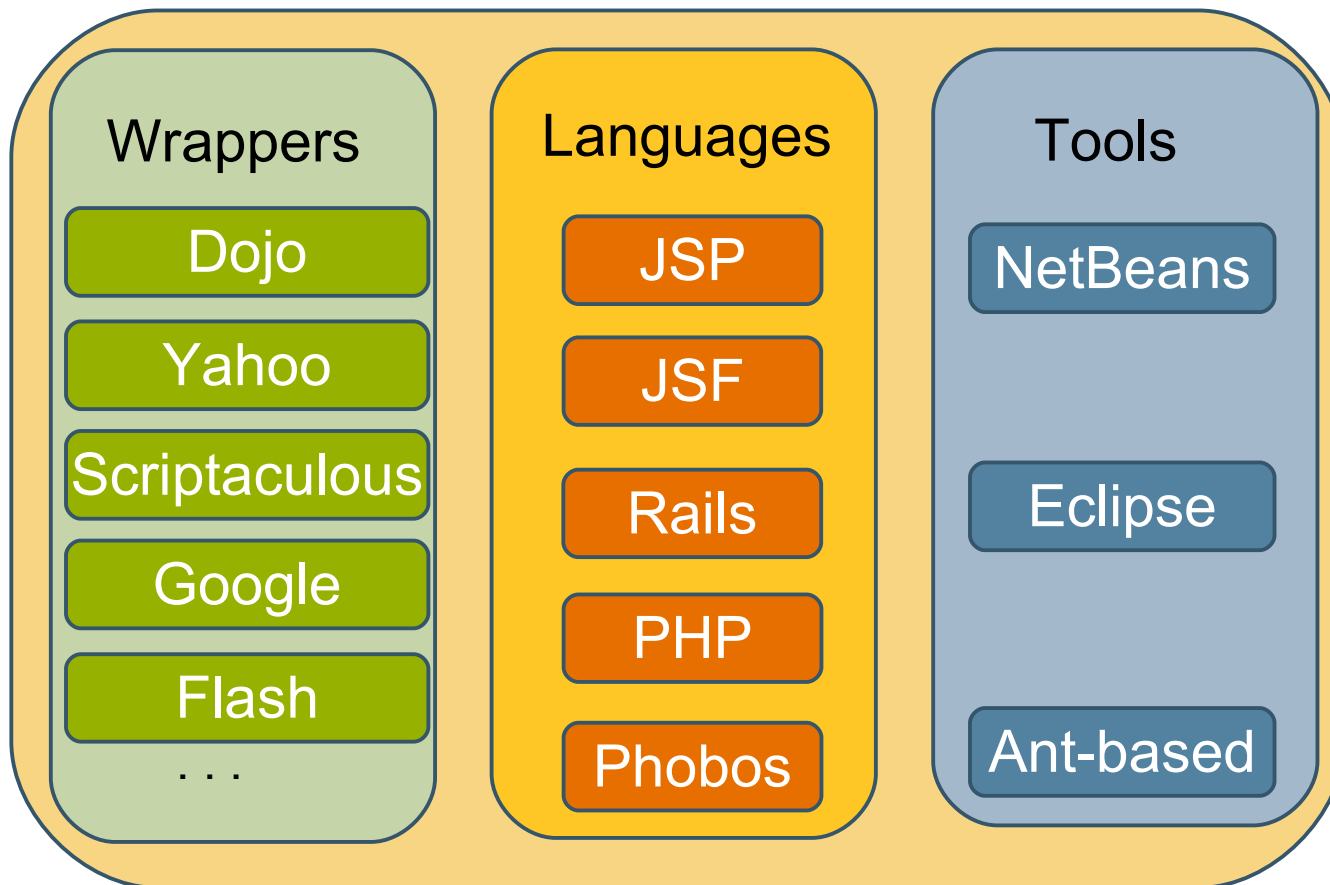


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Goal

Build Ajax-enabled web applications following standard practices using the best toolkits and libraries.

What Is Project jMaki?

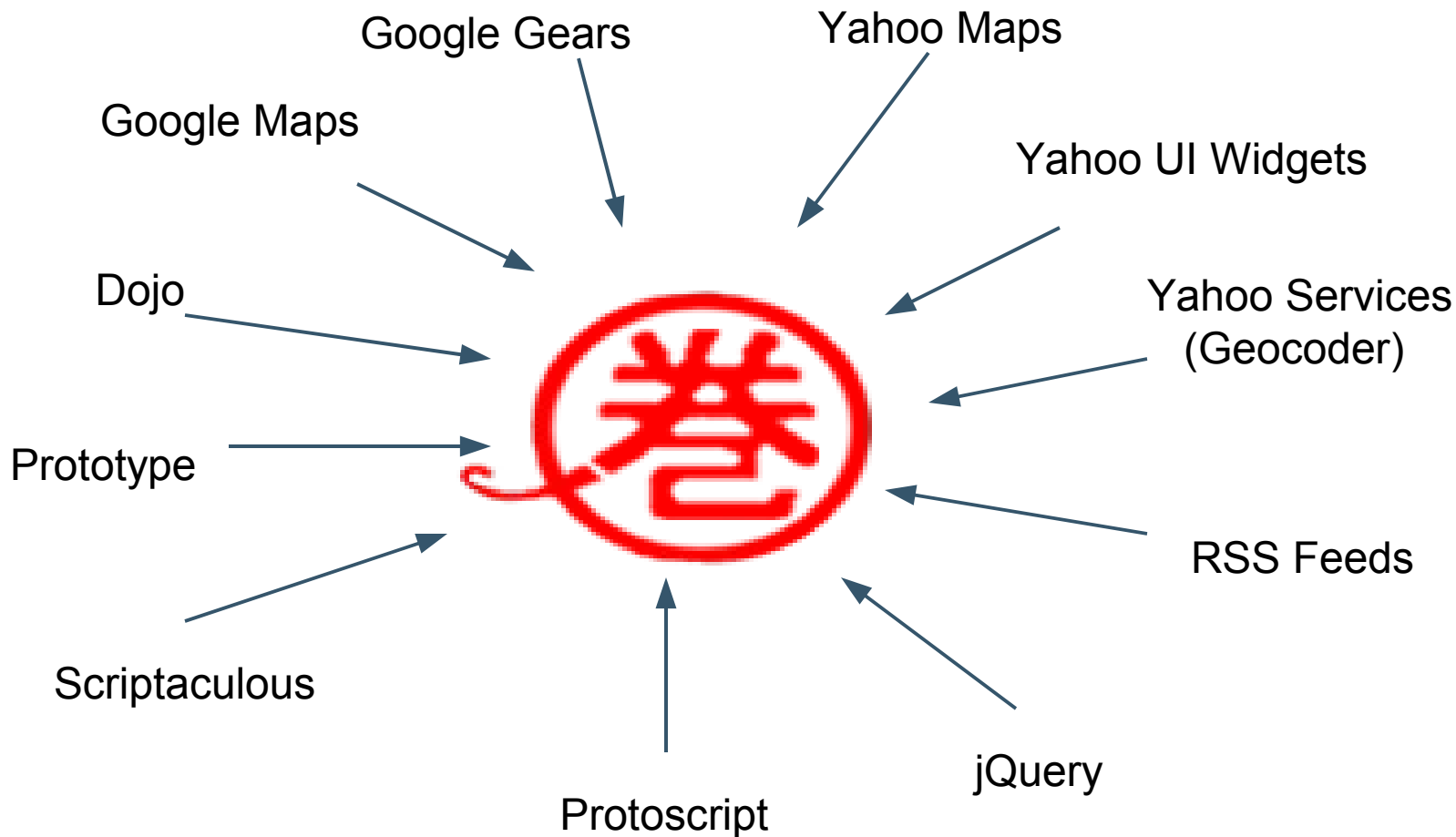


**jMaki – Web 2.0 Apps Your Way
(jmaki.com)**

Why use jMaki ?

- Defaults set out of the box
 - > Convention over configuration
- Portable Widget libraries
 - > Share your extensions / widgets libraries
- Standardizes Event / Data Models
 - > Consistent programming model
- Use the tool of your choice
- Theming Support

jMaki Ecosystem



Multi-Server Support

JSP technology: index.jsp

```
<%@ taglib prefix="a" uri="http://jmaki/v1.0/jsp" %>  
<a:widget name="yahoo_button" />
```

Ruby: indx.rhtml

```
<%= javascript_include_tag "jmaki" -%> <%= jmaki_setup -%>  
<%= jmaki_widget 'yahoo_button' %>
```

PHP: index.php

```
<?php require_once 'Jmaki.php'; ?>  
<?php addWidget( name=>"yahoo_button"); ?>
```

Phobos index.ejs

```
<% library.jmaki.insert(component: "yahoo_button"); %>
```

jMaki Framework

- Widget component model
- Data Models
- Events = Actions / Glue
- Layouts / Theming model
- XmlHttpProxy
- Extensions

Data Models

- Multi-View Containers
 - > Tabbed Views
 - > Accordions
 - > Dynamic Container
- Trees
- Menus
 - > Accordion Menu
 - > Tabbed Menu
- Data Grids/Tables

<http://wiki.java.net/bin/view/Projects/jMakiDataModels>

Immediate Feedback

- Deploy only once
- Create, Edit JSPs/Ruby/PHP
- Save
- Reload page in browser
- Edit, save, test, edit, save, test
- Debug with FireBug / jMaki debugger as needed

Demo

Ease-of-use with NetBeans IDE

Publish/Subscribe

- A means for one or more jMaki widgets to communicate with each other in a page using topics
- Publish/Subscribe is much like a server-side messaging system but it runs in the scope of an HTML page

<https://ajax.dev.java.net/publishsubscribe.html>

Declarative Actions – Publish

```

{menu : [
  {label: 'Actions', menu: [
    { label : 'Select',
      action :{topic: '/foo/select',  message: { targetId : 'tab3'}}
    },
    { label : 'Set Content',
      action :{topic: '/foo/setContent',
        message: { targetId : 'tab3', value : 'Hello There!'}}
    },
    { label : 'Set Include',
      action :{topic: '/foo/setInclude',
        message: { targetId : 'tab3', value : 'main.jsp'}}
    }
  ]
}
] }

```

Declarative Actions – Subscribe

```
subscribe="/foo"

{
  items:[
    { label : 'My Tab', content : 'Some Content'},
    { id : 'tab2',
      label : 'My Tab 2', include : 'tab1.jsp ', lazyLoad : true
    },
    { id : 'tab3',
      label : 'My Tab 3', content : 'More Content', selected : true
    }
  ]
}
```

Demo

Publish/Subscribe Demo

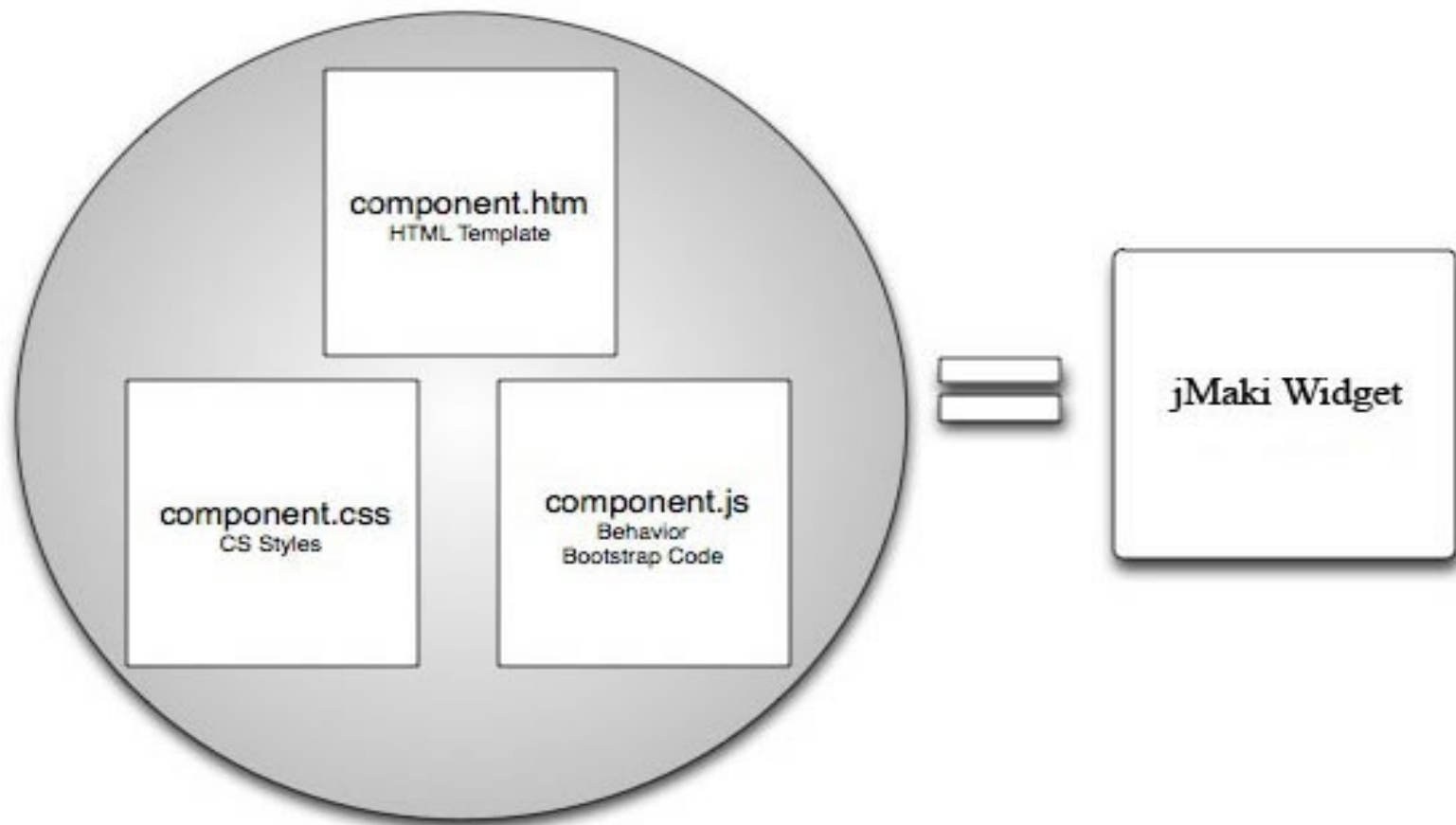
jMaki Glue – Programmatic Events

- Allows you to provide un-obtrusive application behavior in a single place
- Based on publish/subscribe
- Ties the widgets together (loosely) based on topic names

Glue Example

```
var node = {  
    label : 'Graft',  
    expanded : true,  
    children : [  
        {label : 'Graft .1'},  
        {label : 'Graft .2'}  
    ]  
};  
  
// publish the update  
jmaki.publish("/dojo/tree/addNodes", {targetId : 'foo', value : node});
```

Widgets



Hello World Widget

component.htm

```
<div id="{uuid}"></div>
```

component.js

```
jmaki.namespace("jmaki.widgets.hello");  
jmaki.widgets.hello.Widget = function(wargs) {  
    var mydiv = document.getElementById(wargs.uuid);  
    mydiv.innerHTML = "Hello " + wargs.args.name;  
}
```

index.jsp

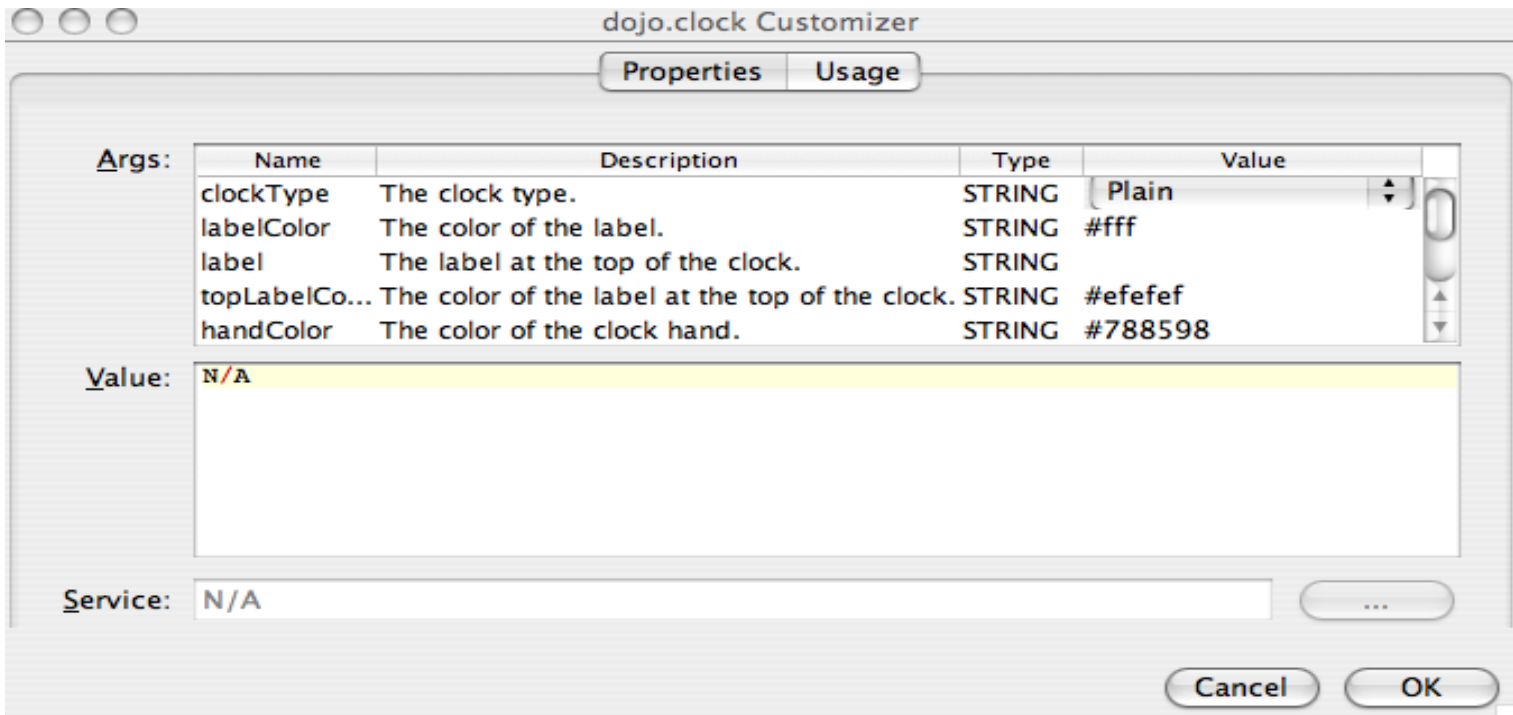
```
<%@ taglib prefix="a"  
    uri="http://java.sun.com/jmaki" %>  
<a:ajax name="hello" args="{name: 'world'}" />
```

jMaki and Netbeans

- Same source, build, dev team, releases
- Same web site, forums download area
- Total synergy both ways
 - > New jMaki features
 - > New tools features

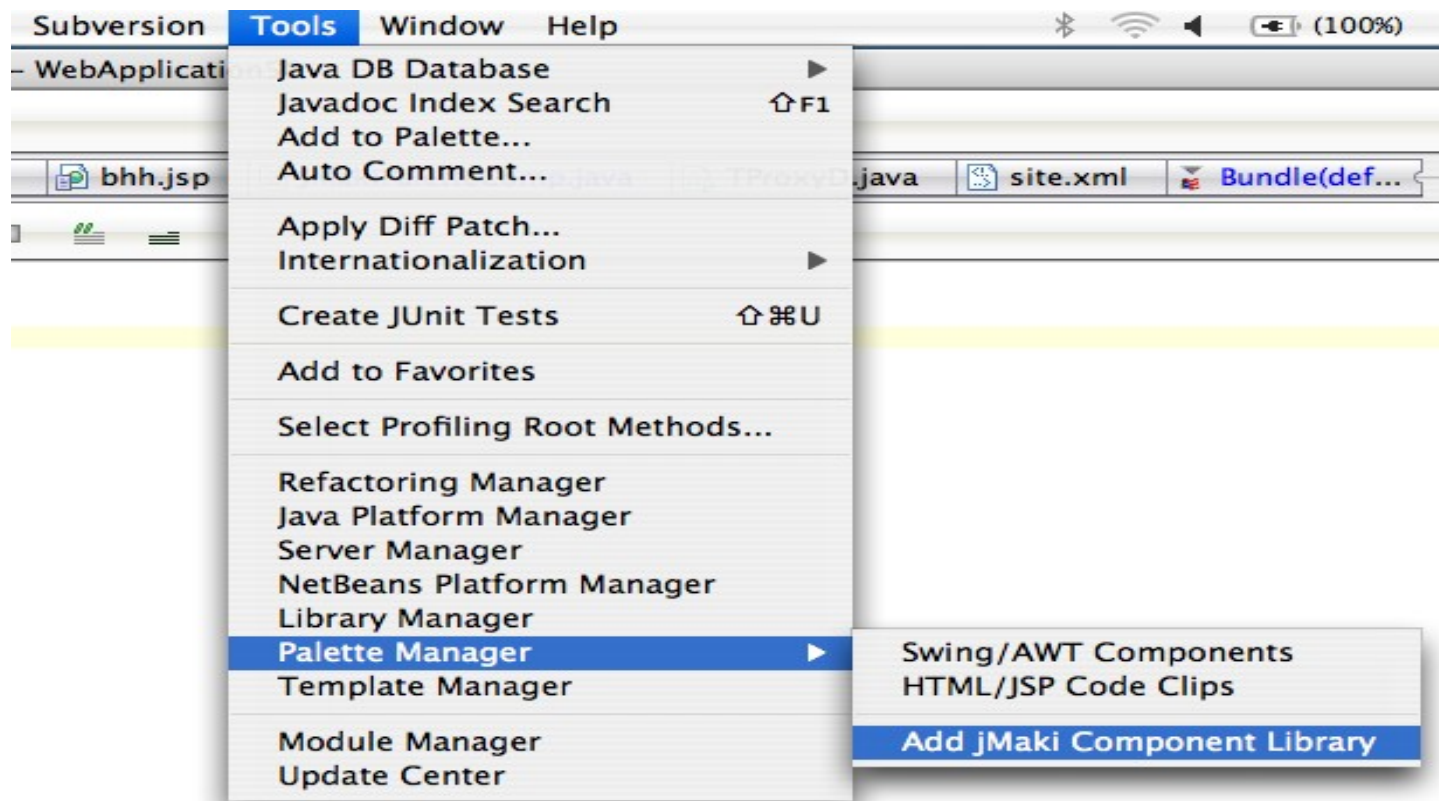
jMaki Customizer

```
<a:widget name="dojo.clock" />
```



```
<a:widget name="dojo.clock"
args="{clockType:'plain', labelColor:'#fff',
topLabelColor:'#efefef'}"/>
```

Extensible Palette – Create your own

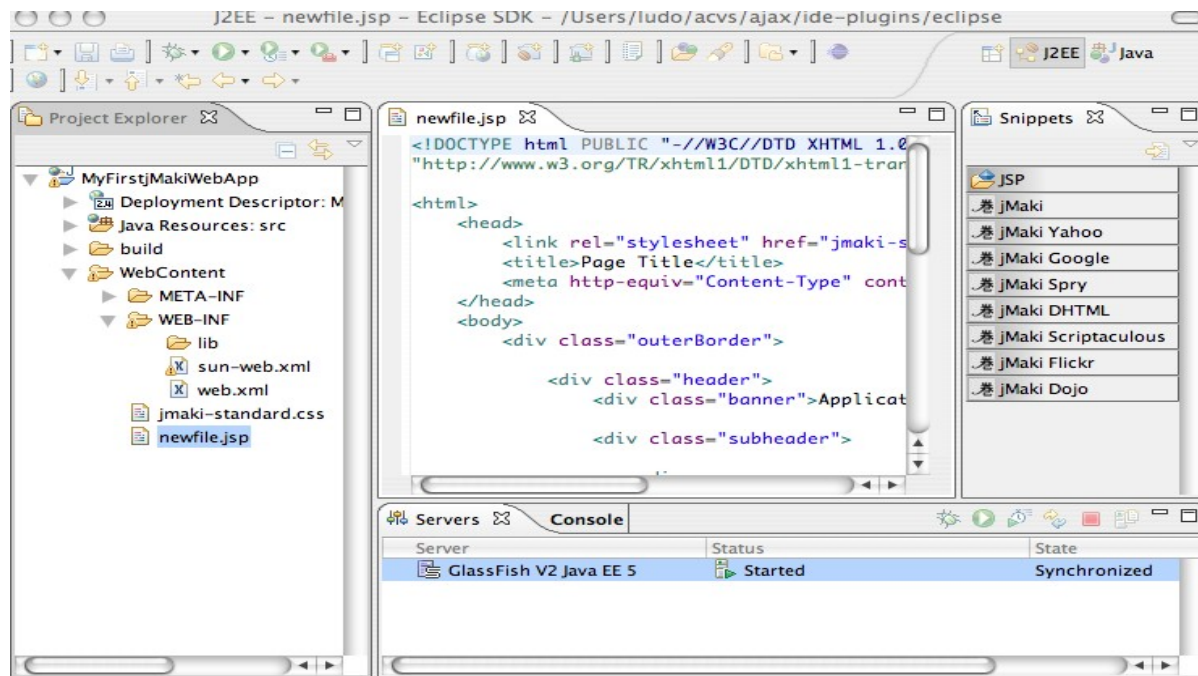


Demo

Extensible Widgets (Charting)

Other Tools

- Ant, Vi, NB 5.5, 5.5.1, 6.0
- Eclipse (<https://ajax.dev.java.net/eclipse>)



Extensible

- jMaki Charting
 - > <https://jmaki-charting.dev.java.net>
- jMaki Widgets
 - > <https://widgets.dev.java.net>
- jMaki Extensions
 - > <https://jmaki-ext.dev.java.net>
- Your own library

Demo

Real-life RIA using jMaki

Roadmap

- 1.0 Release September 25th
- 1.1 Release Discussions have started and branch created
 - > Binding client event bus to server
 - > Server side JavaScript compression
 - > More widgets / libraries

Summary

- Framework for building Ajax enabled Web 2.0 applications
- Java, PHP, JavaScript, and Ruby Support
- Consistent Data Models
- Event handling with Actions and Glue
- Tool support with NetBeans, Eclipse, and Ant
- Extensible via Extensions and your own Widget libraries

For More Information

See Project jMaki website

> <http://jmaki.com>



<http://jmaki.com>