


JBAKE, ASCIIDOCTOR, GROOVY AND FRIENDS FOR MAKING A UNIVERSITY COURSE WEBSITE



WHO AM I?

- Jacob Aae Mikkelsen
- Senior Software Architect at Cardlay A/S
- GR8Conf EU - Organizing Team Member
- External Associate Professor - University of Southern Denmark
- Groovy Ecosystem Nerd
-  @JacobAae

USECASE



Course website at SDU where weekly notes and news items can be published easily

REQUIREMENTS

- Semi-static Website
- Only HTML, Css, JS
- Weekly notes and small news items



And preferably build with Gradle with minimum installation

JBAKE

- Awesome for a static website
- Blog posts will work for weekly notes
- News items?
- Css and javascript can be added
 - How it can be added is included
 - Styling is not a focus in this talk

GETTING STARTED

INITIAL PROJECT

Create a `build.gradle` file with

```
plugins {  
    id 'org.jbake.site' version '5.0.0'  
}
```

Run

```
gradle wrapper --gradle-version 5.4.1  
./gradlew bakeInit
```

FILE STRUCTURE (1)

```
.  
├── build.gradle  
├── gradle  
│   └── wrapper  
│       ├── gradle-wrapper.jar  
│       └── gradle-wrapper.properties  
├── gradlew  
├── gradlew.bat  
├── README.adoc  
└── src
```


FILE STRUCTURE (2)

```
src
├── jbake
│   ├── assets
│   │   ├── css
│   │   ├── favicon.ico
│   │   ├── fonts
│   │   └── js
│   ├── content
│   ├── jbake.properties
│   ├── LICENSE
│   ├── README.md
│   └── templates
```

FILE STRUCTURE (3)

```
templates
├── archive.gsp
├── feed.gsp
├── footer.gsp
├── header.gsp
├── index.gsp
├── menu.gsp
├── page.gsp
├── post.gsp
├── sitemap.gsp
└── tags.gsp
```

FILE STRUCTURE (4)

```
content
├── about.html
├── blog
│   └── 2013
│       ├── first-post.html
│       ├── fourth-post.adoc
│       ├── second-post.md
│       └── third-post.adoc
```

INITIAL BUILD AND RUN

```
./gradlew bake bakePreview
```

Served at <http://localhost:8080>

INITIAL BUILD AND RUN

Blog

Fourth Post

17 October 2013

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque vel diam purus. Curabitur ut nisi lacus.

- <http://example.org>
- [Example.org](http://example.org)

Nam id nisl quam. Donec a lorem sit amet libero pretium vulputate vel ut purus. Suspendisse leo arcu, mattis et imperdiet luctus, pulvinar vitae mi. Quisque fermentum sollicitudin feugiat. Mauris nec leo ligula. Vestibulum tristique odio ut risus ultricies a hendrerit quam iaculis. Duis tempor elit sit amet ligula vehicula et iaculis sem placerat. Fusce dictum, metus at volutpat lacinia, elit massa auctor risus, id auctor arcu enim eu augue. Donec ultrices turpis in mi imperdiet ac venenatis sapien sodales. In consequat imperdiet nunc quis bibendum. Nulla semper, erat quis ornare tristique, lectus massa posuere libero, ut vehicula lectus nunc ut lorem. Aliquam erat volutpat.

Third Post

26 September 2013

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque vel diam purus. Curabitur ut nisi lacus.

- <http://example.org>
- [Example.org](http://example.org)

Nam id nisl quam. Donec a lorem sit amet libero pretium vulputate vel ut purus. Suspendisse leo arcu, mattis et imperdiet luctus, pulvinar vitae mi. Quisque fermentum sollicitudin feugiat. Mauris nec leo ligula. Vestibulum tristique odio ut risus ultricies a hendrerit quam iaculis. Duis tempor elit sit amet ligula vehicula et iaculis sem placerat. Fusce dictum, metus at volutpat lacinia, elit massa auctor risus, id auctor arcu enim eu augue. Donec ultrices turpis in mi imperdiet ac venenatis sapien sodales. In consequat imperdiet nunc quis bibendum. Nulla semper, erat quis ornare tristique, lectus massa posuere libero, ut vehicula lectus nunc ut lorem. Aliquam erat volutpat.

BLOG POSTS - PREAMBLES

HTML

```
title=First Post  
date=2019-05-26  
type=post  
tags=blog  
status=published  
~~~~~
```

```
<h1>HTML From here</h1>
```

ASCIIDOCTOR

```
title=Third Post
date=2019-05-27
type=post
tags=blog, asciidoc
status=published
~~~~~
= Third Post
Jacob Aae Mikkelsen
2019-05-27
```


TEMPLATES

TEMPLATE ENGINES

- Groovy
- Freemarker
- Thymeleaf
- Jade

GROOVY TEMPLATE ENGINES

- Groovy's SimpleTemplateEngine (.gsp .groovy)
- Groovy's XmlTemplateEngine (.gxml)
- Groovy's MarkupTemplateEngine (.tpl)

TEMPLATE FOR BLOG

src/jbake/templates/post.gsp

```
<%include "header.gsp"%>
  <%include "menu.gsp"%>

  <div class="page-header">
    <h1>${content.title}</h1>
  </div>
  <p><em>${new java.text.SimpleDateFormat(
    "dd MMMM yyyy", Locale.ENGLISH).format(content.date)}</em></p>
  <p>${content.body}</p>

  <hr />
<%include "footer.gsp"%>
```

NEWS ITEMS

- News items are not blog posts/weekly notes
- Short message

CONFIGURE TEMPLATE

src/jbake/jbake.properties

```
template.news.file=news.gsp
```

NEW TEMPLATE

src/jbake/templates/news.gsp

```
<%include "header.gsp"%>
  <%include "menu.gsp"%>

  <div class="page-header">
    <h1>${content.title}</h1>
  </div>
  <p><em>${new java.text.SimpleDateFormat(
    "dd MMMM yyyy", Locale.ENGLISH).format(content.date)}</em></p>
  <p>${content.body}</p>

  <hr />
<%include "footer.gsp"%>
```

NEWS ITEM

src/jbake/content/news/item1.adoc

```
title=First news item
date=2019-05-27
type=news
tags=demo
status=published
icon=glyphicon-thumbs-up
~~~~~
= First news item
Jacob Aae Mikkelsen
2019-05-27

Demo for GR8Conf! Here it is
```


INCLUDE IN MAIN SITE

```
<%newss.findAll{ it.status == 'published'}.each { newItem -> %>
<h1>
  <span class="glyphicon ${newItem.icon}" aria-hidden="true"></span>
  ${newItem.title}
</h1>
<p>${new java.text.SimpleDateFormat("dd MMMM yyyy",
  Locale.ENGLISH).format(newItem.date)}</p>
<p>${newItem.body}</p>
<%}%>
```

RESULT

JBake Home About Subscribe Dropdown ▾

News

News Item 1

27 May 2019

Demo for GR8Conf! Here it is

Blog

Fourth Post

17 October 2013

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque vel diam purus. Curabitur ut nisi lacus.

- <http://example.org>
- [Example.org](#)

Nam id nisi quam. Donec a lorem sit amet libero pretium vuloutate vel ut orurus. Suspendisse leo arcu. mattis et imperdiet luctus. vulvinar vitae mi. Quisque fermentum sollicitudin

ASSETS

SASS SUPPORT

build.gradle

```
plugins {  
    id 'org.jbake.site' version '5.0.0'  
    id "com.bertramlabs.asset-pipeline" version "3.0.10"  
}  
dependencies {  
    assets 'com.bertramlabs.plugins:sass-asset-pipeline:3.0.10'  
}  
assets {  
    minifyCss = true  
}
```

- `assetCompile` - Compiles and packages assets from *src/assets* into *build/assets*

SASS FILE

src/assets/stylesheets/demo.scss

```
$body-bg: #edef0;  
  
body {  
  background: $body-bg;  
}  
  
h1 {  
  color: #ffa600;  
}
```

TOTAL CSS FILE

src/assets/stylesheets/application.css

```
/*  
* This is a manifest file that will be compiled into application.css,  
* which will include all the files  
* listed below.  
*  
* Any CSS file in this directory can be referenced using a relative path.  
*  
* You are free to add application-wide styles to this file and it will  
* appear at the top of the compiled file, but it is generally better  
* to create a new file per style scope.  
*  
*= require demo.css  
*= require_self  
*/
```

COMPILING SASS FILES

```
./gradlew assetCompile
```

Places compiled files in `build/assets`

IN BUILD.GRADLE

```
task buildWebsite(type: Copy, dependsOn: assetCompile) {  
    from('build/assets/') {  
        include 'application.css'  
    }  
    into 'build/jbake/css/'  
}  
  
buildWebsite.dependsOn bake
```



./gradlew buildWebsite

INCLUDE

src/jbake/templates/header.gsp

```
<link href="<%if (content.rootpath) {%>${content.rootpath}<% }  
      else { %><% }%>css/application.css" rel="stylesheet">
```

BUILDING AND RUNNING

```
./gradlew buildWebsite bakePreview
```

RESULT

JBake Home About Subscribe Dropdown ▾

News

News Item 1

27 May 2019

Demo for GR8Conf! Here it is

Blog

Fourth Post

17 October 2013

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque vel diam purus. Curabitur ut nisi lacus.

- <http://example.org>
- [Example.org](http://example.org)

GROOCSS AND ASSET PIPELINE

IN BUILD.GRADLE

```
dependencies {
    assets 'com.bertramlabs.plugins:sass-asset-pipeline:3.0.10'
    assets 'com.bertramlabs.plugins:groocss-asset-pipeline:3.0.10'
}

assets {
    minifyCss = true
    configOptions = [
        groocss: [
            compress: true, noExts: true, convertUnderline: true
        ]
    ]
}
```

GROOCSS FILE

src/assets/stylesheets/groovy.groocss

```
def myColor = c('#fe33ac')

_.box { // _.box becomes .box
  color myColor
  borderColor myColor
  borderWidth '3px'
  borderStyle 'solid'
}

table thead tr th {
  color myColor
}
```

INCLUDE IN APPLICATION.CSS

src/assets/stylesheets/application.css

```
/*  
* ...  
*= require demo.css  
*= require groovy.css  
*= require_self  
*/
```

RESULT

Fourth Post

17 October 2013

- <http://example.org>
- [Example.org](http://example.org)

Table 1. Demo Table

Header 1	Header 2	Header 3
Column 1, row 1	Column 2, row 1	Column 3, row 1
Column 1, row 2	Column 2, row 2	Column 3, row 2
Column 1, row 3	Column 2, row 3	Column 3, row 3

```
def concat1 = { String... args -> args.join('') } // (1)
assert concat1('abc','def') == 'abcdef' // (2)
def concat2 = { String[] args -> args.join('') } // (3)
```


SUMMARY

- JBake works well with Groovy
- Different item types is supported with different templates
- Css and javascript was not a focus in this presentation

REFERENCES

- <https://github.com/jbake-org/jbake-gradle-plugin>
- <https://jbake.org/>
- <https://imada.sdu.dk/~jamik/dm510-19/>
- <https://imada.sdu.dk/~jamik/dm557-18/>