

# WEB + APP 컨텐츠 한번에 만들기

오픈프론티어 2기 - AXISJ 장기영



[www.axisj.com](http://www.axisj.com)



# 장기영 (Thomas Jang)

tom@axisj.com

14년차 소프트웨어 개발자  
AXISJ 오픈소스 core architect  
NIPA 오픈프론티어 2기 (파트타임)  
NIA 2014 슈퍼개발자K3 우승



[github.com/axisj](https://github.com/axisj)

[facebook.com/axisj](https://facebook.com/axisj)

[www.axisj.com](http://www.axisj.com)

*Web Programming*

90

*Javascript & CSS & HTML5*

95

*UI Development*

95

*Project Manage*

90

*Design*

50

# 액시스제이는 (AXISJ)

“  
제이쿼리(jQuery) 프레임워크를 기반으로 웹 애플리케이션을 제작 하기 위한 자바스크립트 UI 라이브러리입니다. ”

Javascript UI Framework based on jQuery

“  
액시스제이(AXISJ)는 "자바스크립트의 축(Axis of Javascript)"  
라는 의미와 Application eXperience AX를 지향 한다는 의미를 담고 있습니다. ”

aka : AX:J, AXJ

# 액시스제이의 정신



A



XI



S



J



불타는 열정의 개미군단을 상징



발로 자를 든 개 - 개.발.자

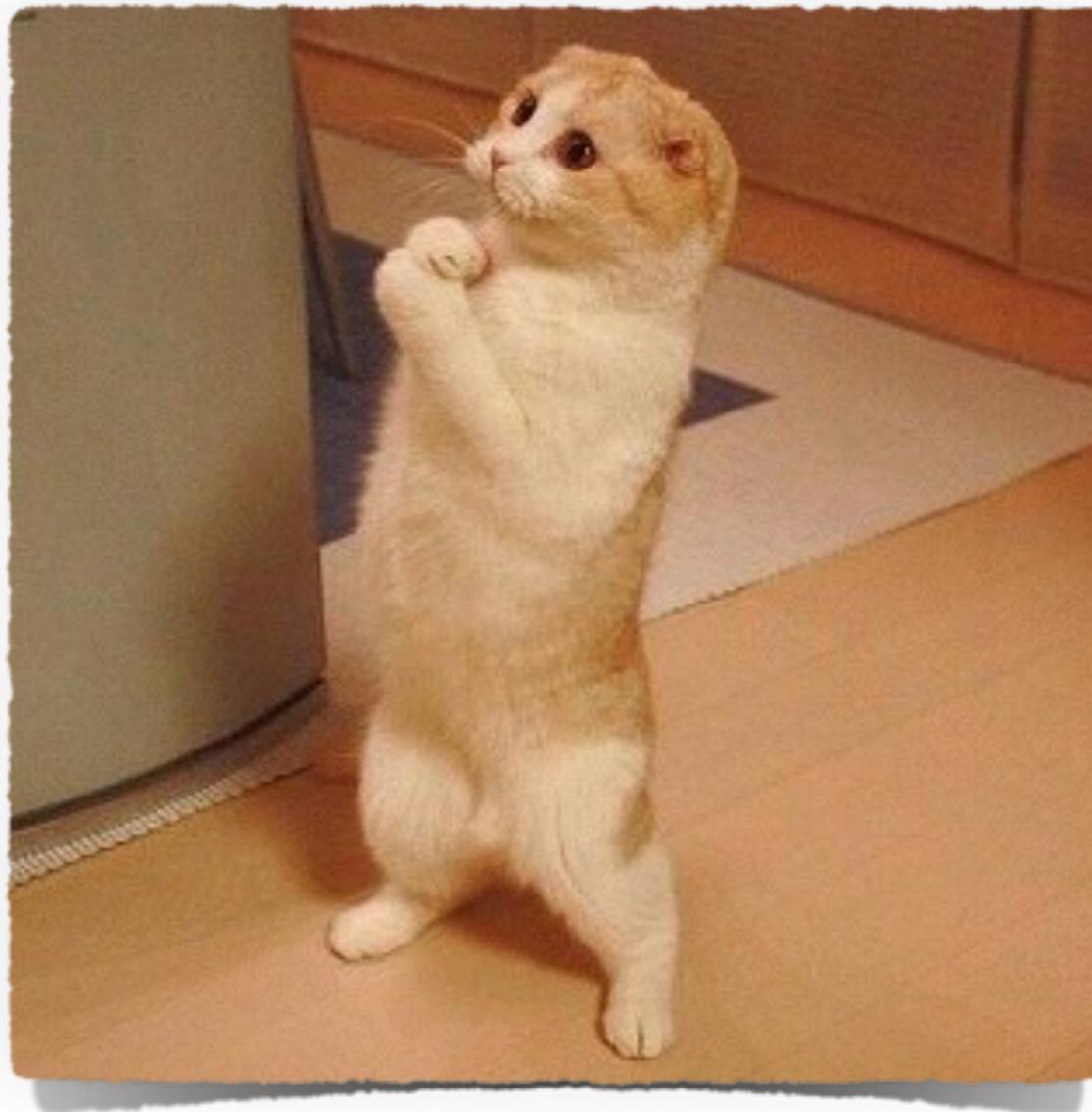


Dragon : 용(for)  
환상속의 동물로 신묘한 힘을  
가지고 있다는 전설이 있음.



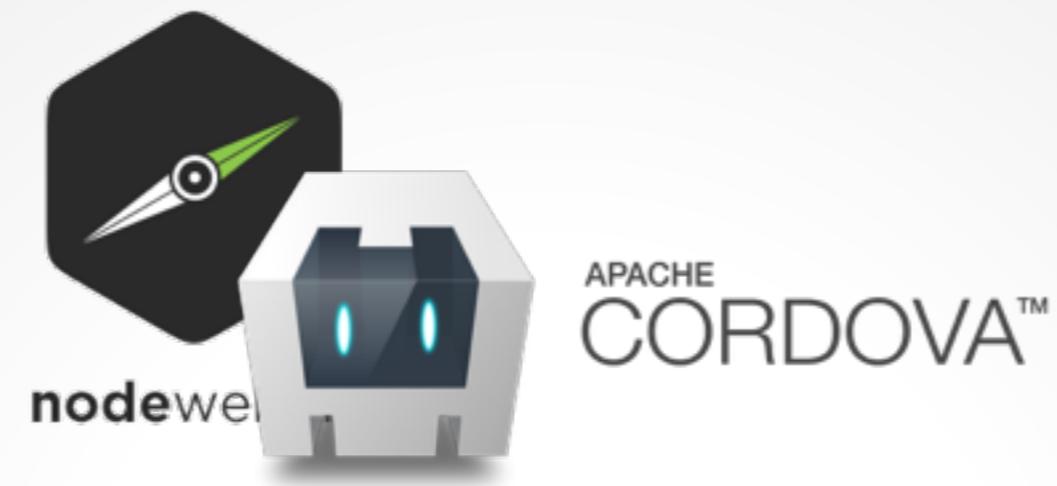
커피잔을 든 독사 : Javascript  
커피는 자바산이 유명하다

# 액시스제이와 오픈소스에 관심 부탁드려요





“컨텐츠”를 어떻게 하면 한번에 만들까 ?



멋진 오픈소스 POS를 만들자 !!



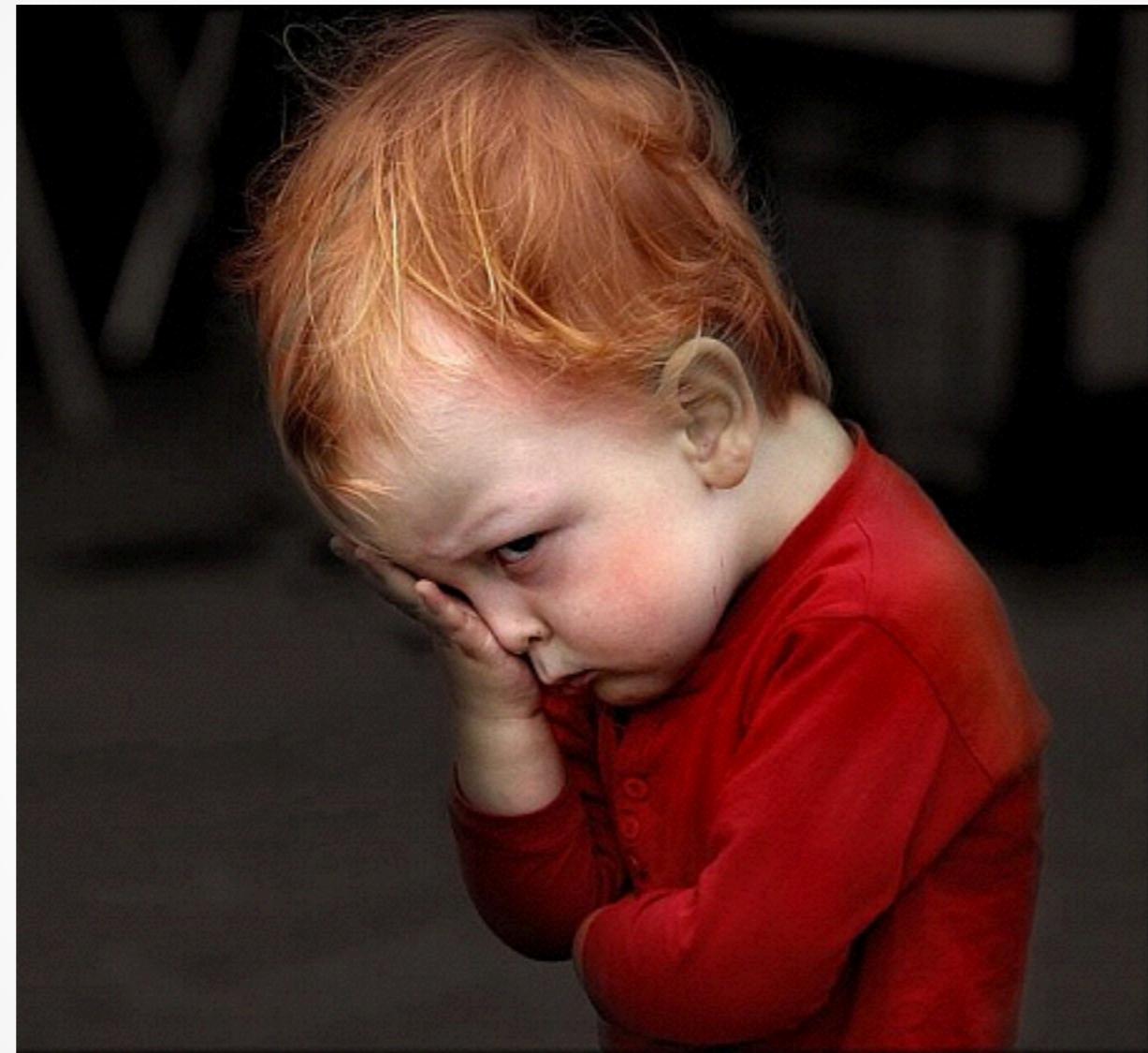
APACHE  
CORDOVA™

앱 안에 들어갈 리소스 필요 (HTML)

= 90%

웹서비스를 위한 리소스 필요 (JSP)





노가다는 이제 제발 그만하고 싶다.

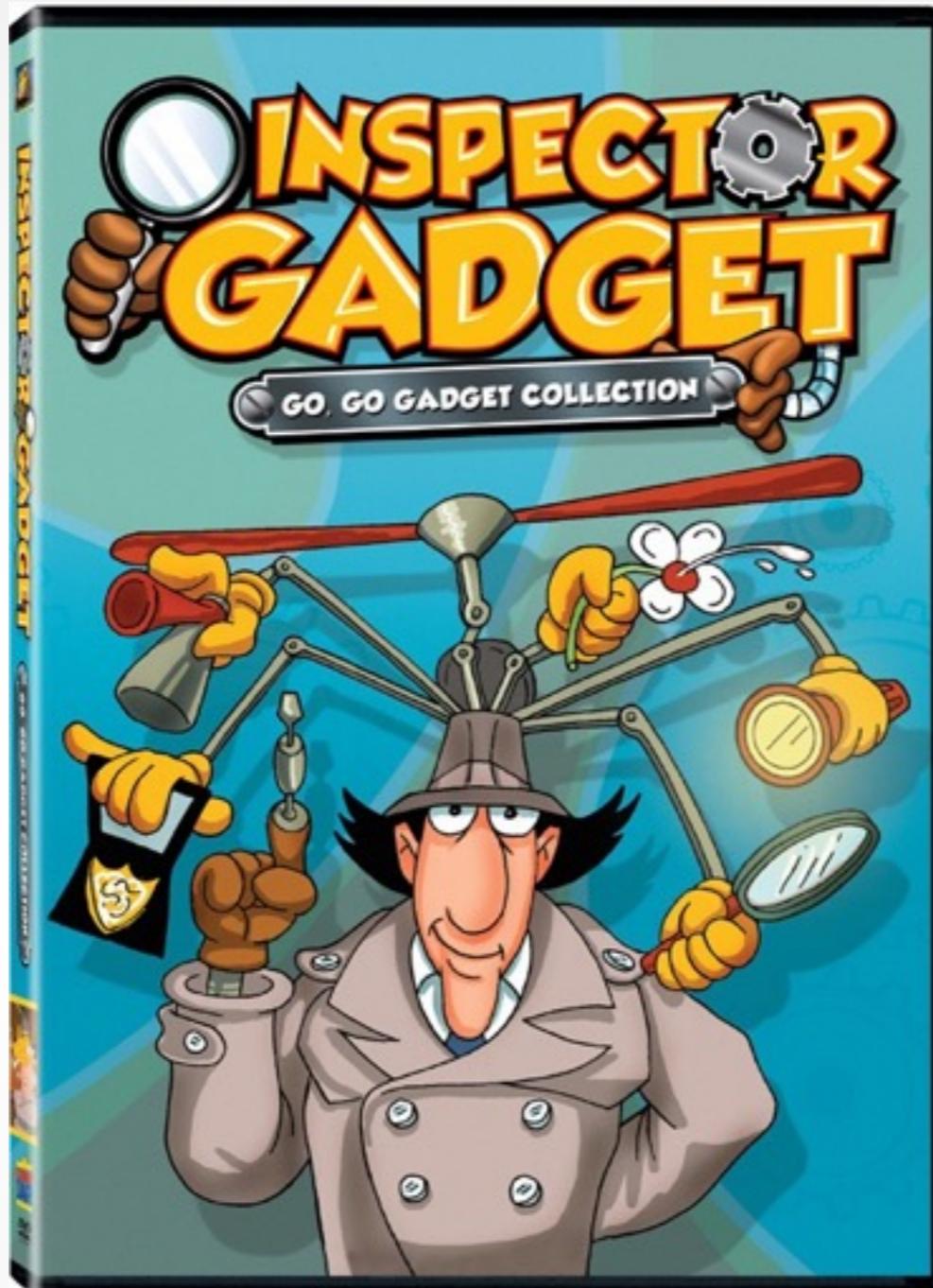
웹에서는 못봐요?

다국어 되죠?

형~ 더 빨리  
개발못해?

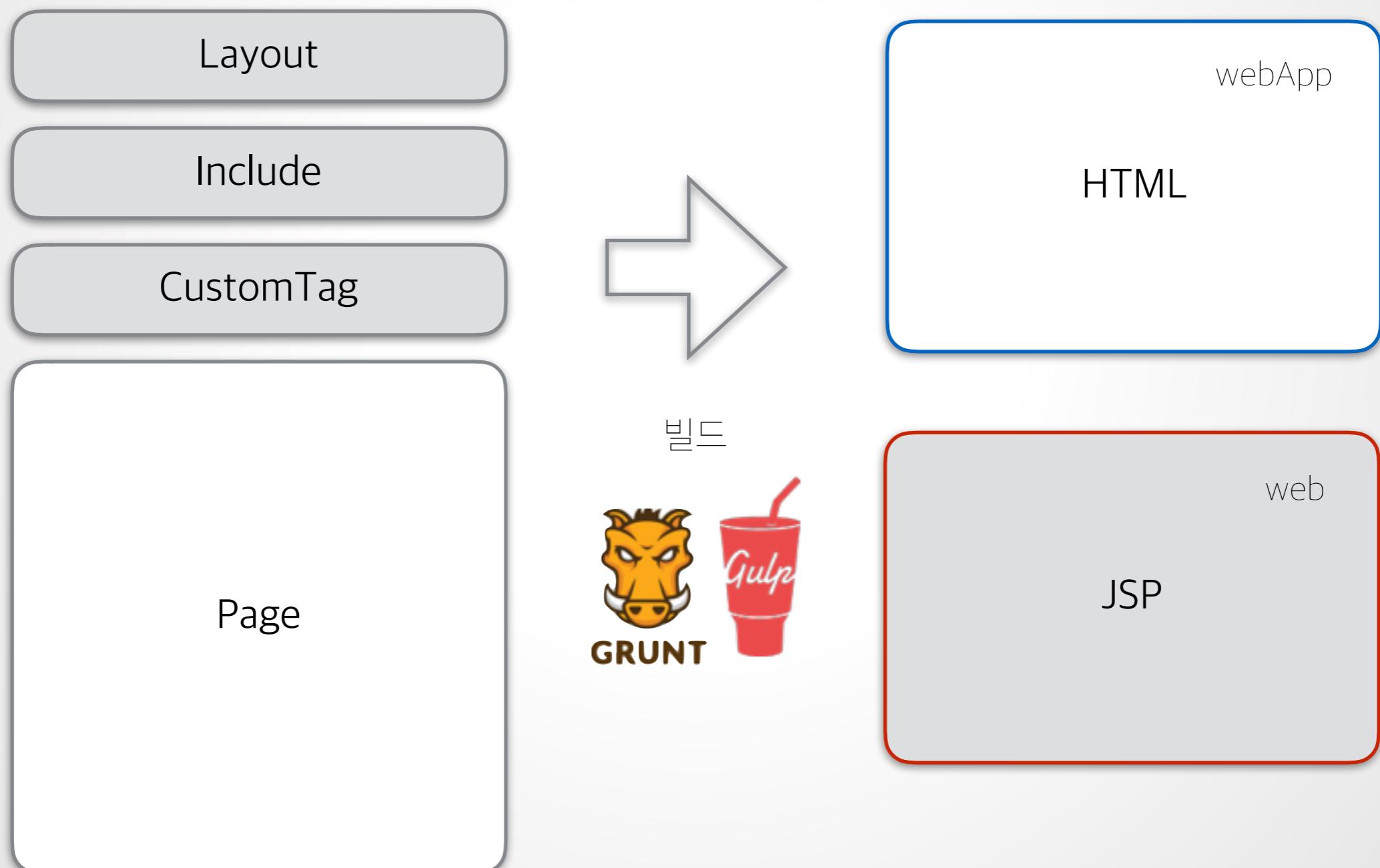
오타가 있네~

앱인데 껌벅이네..



하지만 프론트엔드 개발은 1명

# 페이지 빌드 계획 (개발타임)



**“템플릿 엔진을 찾아야 한다~!!”**

템플릿으로 2가지 용도로 빌드하자!!

# 템플릿 선정 조건

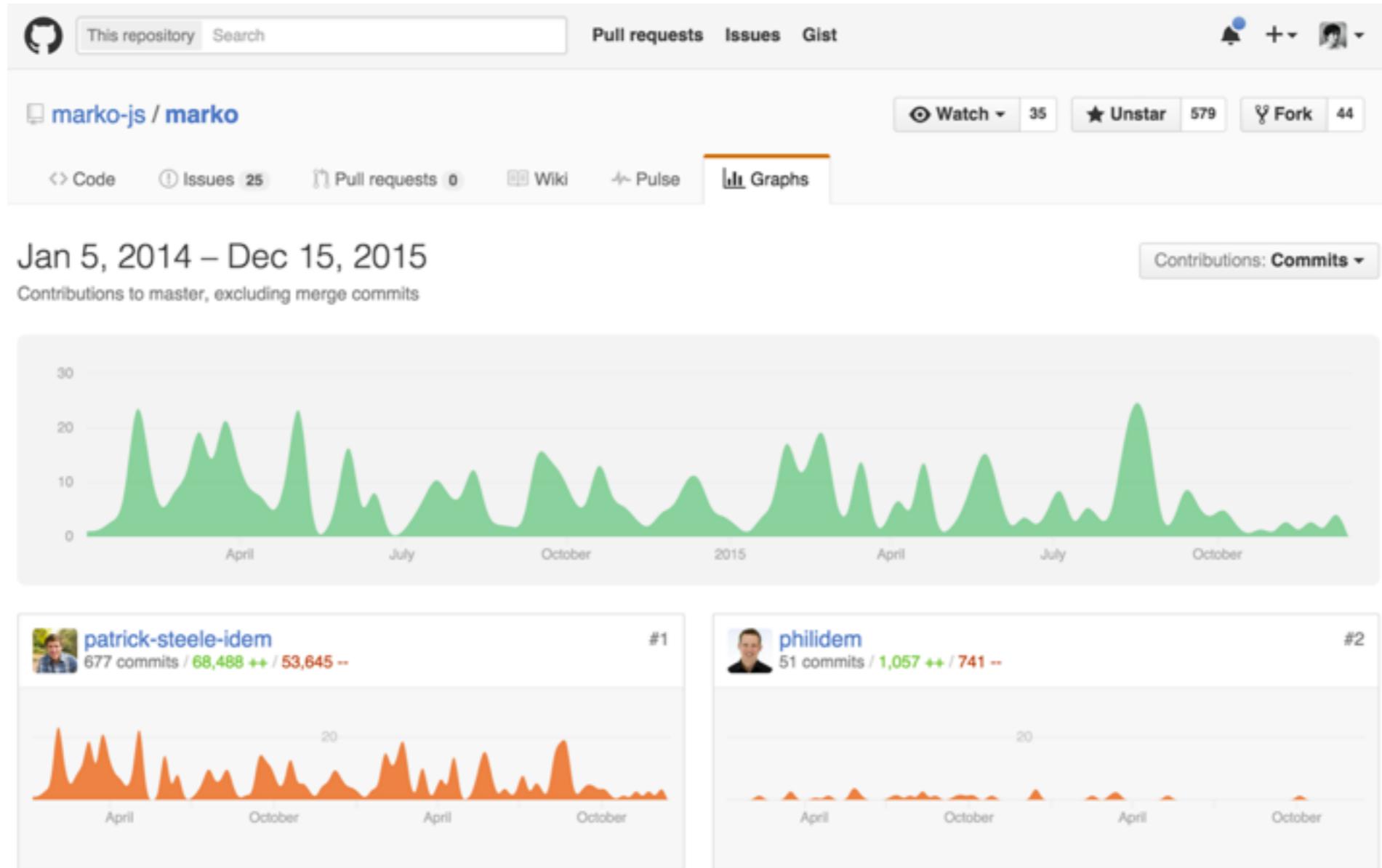
- nodeJS에서 돌릴 수 있어야함. (NPM에 있어함)
  - Layout/Include를 당연히 지원해야함.
  - Custom tag library를 지원해야함.
  - 믿을 수 있어야함.
- ✓ 유지보수가 아주 쉬워야 한다.

# 템플릿 후보리스트

- ~~Mustache, Hogan.js, Handlebars.js, assemble~~ 너무 간단해서
  - ~~JADE~~ 세상이 좋아졌지만 닫는 태그가 없어서야…
  - ~~AngularJS, ReactJS~~ 유지보수가 너무 어려워
- ✓ Marko (<http://markojc.com/>)



왠지 나만 아는 것 같은 느낌.. 설렘반 걱정반



Marko is an **eBay** open source **HTML-based templating engine** that can be used to render templates on the **server** (Node.js) or in the **web browser**.



# Layout (OK), Include (OK), CustomTag (OK) and 'eBay'

The screenshot shows a web browser window with the following details:

- Title Bar:** Language Guide | Marko
- Address Bar:** markojs.com/docs/marko/language-guide/#layout-taglib
- Header:** A dark header bar with a colorful 'M' logo on the left, 'Docs' in the center, and 'Components' on the right.
- Left Sidebar (Marko):**
  - Marko
  - Overview
  - Get Started
  - JavaScript API
  - Language Guide** (highlighted)
  - Custom Taglibs
  - Compiler
  - FAQ
  - Additional Resources
- Content Area:**
  - Language Guide // Marko**
  - Table of Contents**
    - Template Directives Overview
      - Text Replacement
      - Expressions
      - Includes
      - Variables
      - Conditionals
        - if...else-if...else
        - unless...else-if...else
        - Shorthand Conditionals
        - Conditional Attributes
    - Looping
      - for
        - Loop Status Variable
        - Loop Separator
        - Range Looping
        - Property Looping
        - Custom Iterator
    - Macros
- Right Sidebar (Comments):**

React has a lot of great ideas, but it also has a lot of complexity and it is a very large library. Marko Widgets adopted a lot of the good ideas from React (stateful UI components, DOM diffing/patching), but Marko is a lot less complex and a lot smaller. React also doesn't perform well on the server, but Marko performs extremely well on the server. I think Angular is just a complex beast and it only works in the browser.

Ewan-Walker 12월 13 03:05  
Yeah im fairly new to doing things with node (primarily been a PHP guy) and only recently picked up node and have been loving the way it does things but this makes life easier, as getting into it isn't as much of a large hassle

patrick-steele-idem 12월 13 03:13  
Glad to hear. I think you'll continue to enjoy Node. We've intentionally kept Marko small and focused and it can be used as a standalone templating engine and if you want client-side behavior you can optionally choose to adopt Marko Widgets. We kept the projects separate to avoid complexity and to make it easier for developers to digest what each project is doing. With that said, Marko and Marko Widgets work really well together. For some context, at eBay, the majority of our front-end is being rebuilt on Node.js and all of the product teams have adopted Marko and Marko Widgets.

Ewan-Walker 12월 13 03:15

# 개발타임 - marko 템플릿 랜더링

템플릿 파일 리스트 수집



각 파일을 로드하여 marko 랜더링

```
var marko = require('marko');
var tmpl = marko.load(filepath);
tmpl.render(lang_view, function(err, output){
  // write file
  file.write(output);
});
```



파일저장

HTML

JSP



그런트로  
해결하자

그런데...

엔진만 있고.. Grunt 플러그인이 없다.



없으면, 만들자 ~  
난 슈퍼개발자니까

# Grunt API

The screenshot shows a web browser window with multiple tabs open, including "Handlebars.js - Google 검색", "grunt.file - Grunt: The Java", "grunt - Google 검색", and "mdn filter - Google 검색". The main content area displays the "grunt.file" API documentation. At the top, there's a navigation bar with links to "Getting Started", "Plugins", "Documentation", and "API". On the left, there's a sidebar with the Grunt logo and a list of API modules: "API", "grunt", "grunt.config", "grunt.event", "grunt.fail", "grunt.file" (which is highlighted), "grunt.log", "grunt.option", "grunt.task", "grunt.template", and "grunt.util". Below the sidebar, the main content starts with a section titled "Character encoding". It includes a code example: 

```
grunt.file.defaultEncoding = 'utf8';
```

 and another section titled "grunt.file.preserveBOM" with the note "Added in 0.4.2".

## grunt.file

There are many provided methods for reading and writing files, traversing the filesystem and finding files by matching globbing patterns. Many of these methods are wrappers around built-in Node.js file functionality, but with additional error handling, logging and character encoding normalization.

Note: all file paths are relative to the `Gruntfile` unless the current working directory is changed with `grunt.file.setBase` or the `--base` command-line option.

### Character encoding

#### grunt.file.defaultEncoding

Set this property to change the default encoding used by all `grunt.file` methods. Defaults to `'utf8'`. If you do have to change this value, it's recommended that you change it as early as possible inside your Gruntfile.

```
grunt.file.defaultEncoding = 'utf8';
```

#### grunt.file.preserveBOM

Added in 0.4.2

Whether to preserve the Byte Order Mark (BOM) on `file.read` rather than strip it.

```
grunt.file.preserveBOM = false;
```



## Creating plugins

1. Install grunt-init with `npm install -g grunt-init`
2. Install the gruntplugin template with  
`git clone git://github.com/gruntjs/grunt-init-gruntplugin.git ~/.grunt-init/gruntplugin`  
(`%USERPROFILE%\.grunt-init\gruntplugin` on Windows).
3. Run `grunt-init gruntplugin` in an empty directory.
4. Run `npm install` to prepare the development environment.
5. Author your plugin.
6. Run `npm publish` to publish the Grunt plugin to npm!



```
Last login: Tue Dec 15 18:54:08 on ttys000
[toms-mac:~ tom$ cd study/test-grunt-plugin/
[toms-mac:test-grunt-plugin tom$ grunt-init gruntplugin
Running "init:gruntplugin" (init) task
```

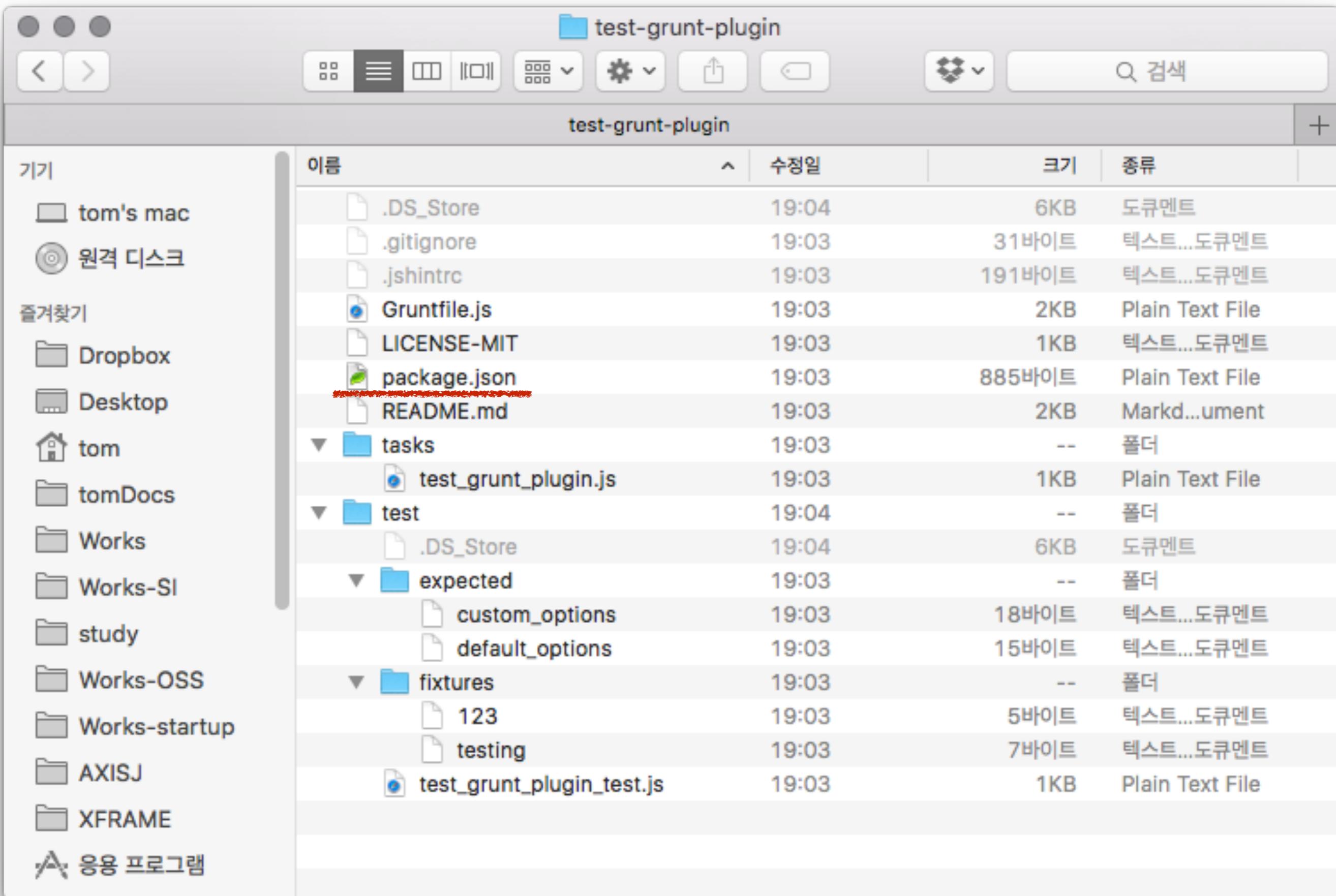
This task will create one or more files in the current directory, based on the environment and the answers to a few questions. Note that answering "?" to any question will show question-specific help and answering "none" to most questions will leave its value blank.

#### "gruntplugin" template notes:

For more information about Grunt plugin best practices, please see the docs at <http://gruntjs.com/creating-plugins>

#### Please answer the following:

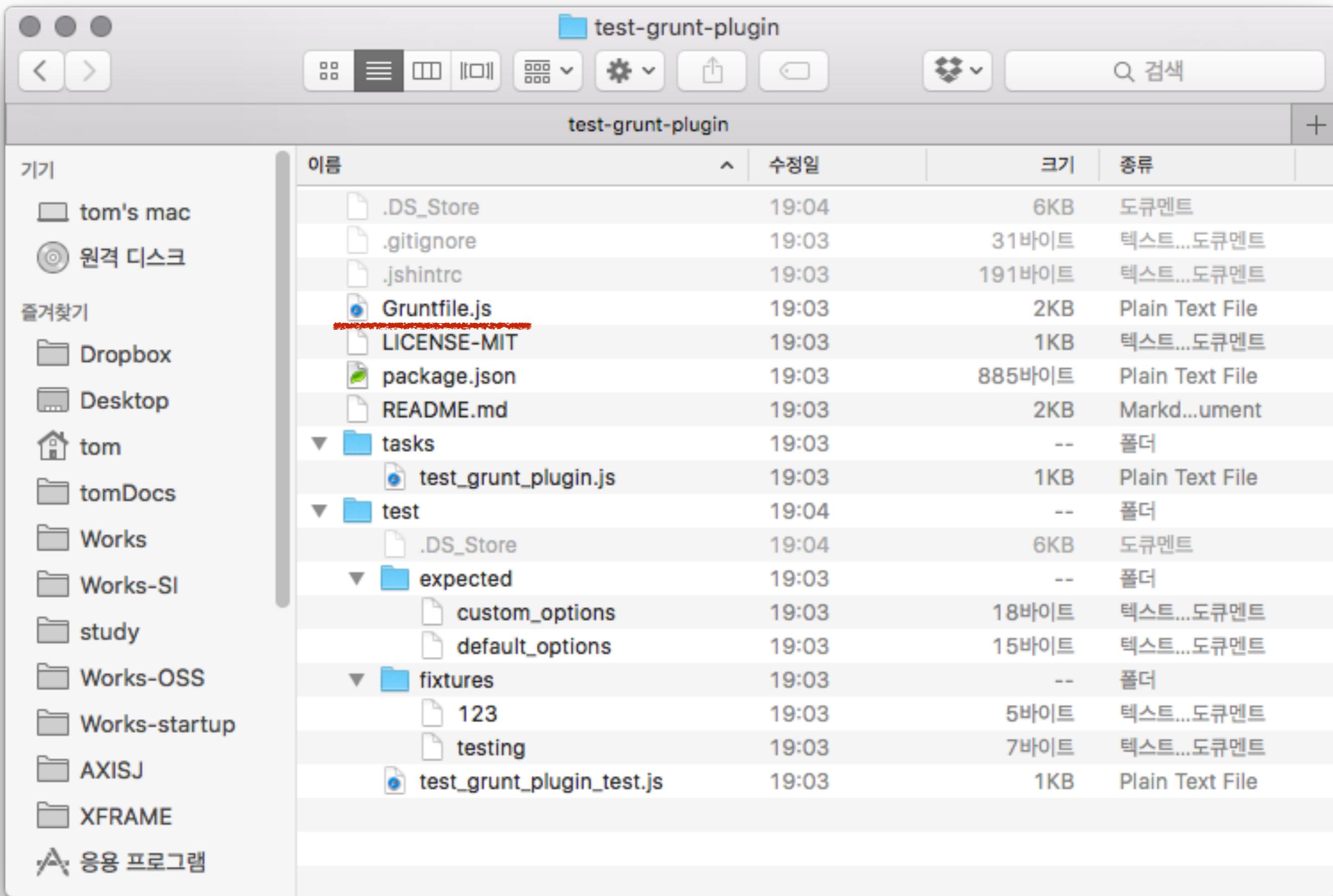
- [?] Project name (grunt-test-grunt-plugin) test-grunt-plugin
- [?] Description (The best Grunt plugin ever.)
- [?] Version (0.1.0)
- [?] Project git repository (git://github.com/tom/test-grunt-plugin.git)
- [?] Project homepage (<https://github.com/tom/test-grunt-plugin>)
- [?] Project issues tracker (<https://github.com/tom/test-grunt-plugin/issues>)
- [?] Licenses (MIT)
- [?] Author name (ThomasJ)
- [?] Author email (tom@axisj.com)
- [?] Author url (none)
- [?] What versions of grunt does it require? (~0.4.5)
- [?] What versions of node does it run on? (>= 0.8.0)
- [?] Do you need to make any changes to the above before continuing? (y/N) N



# package.json

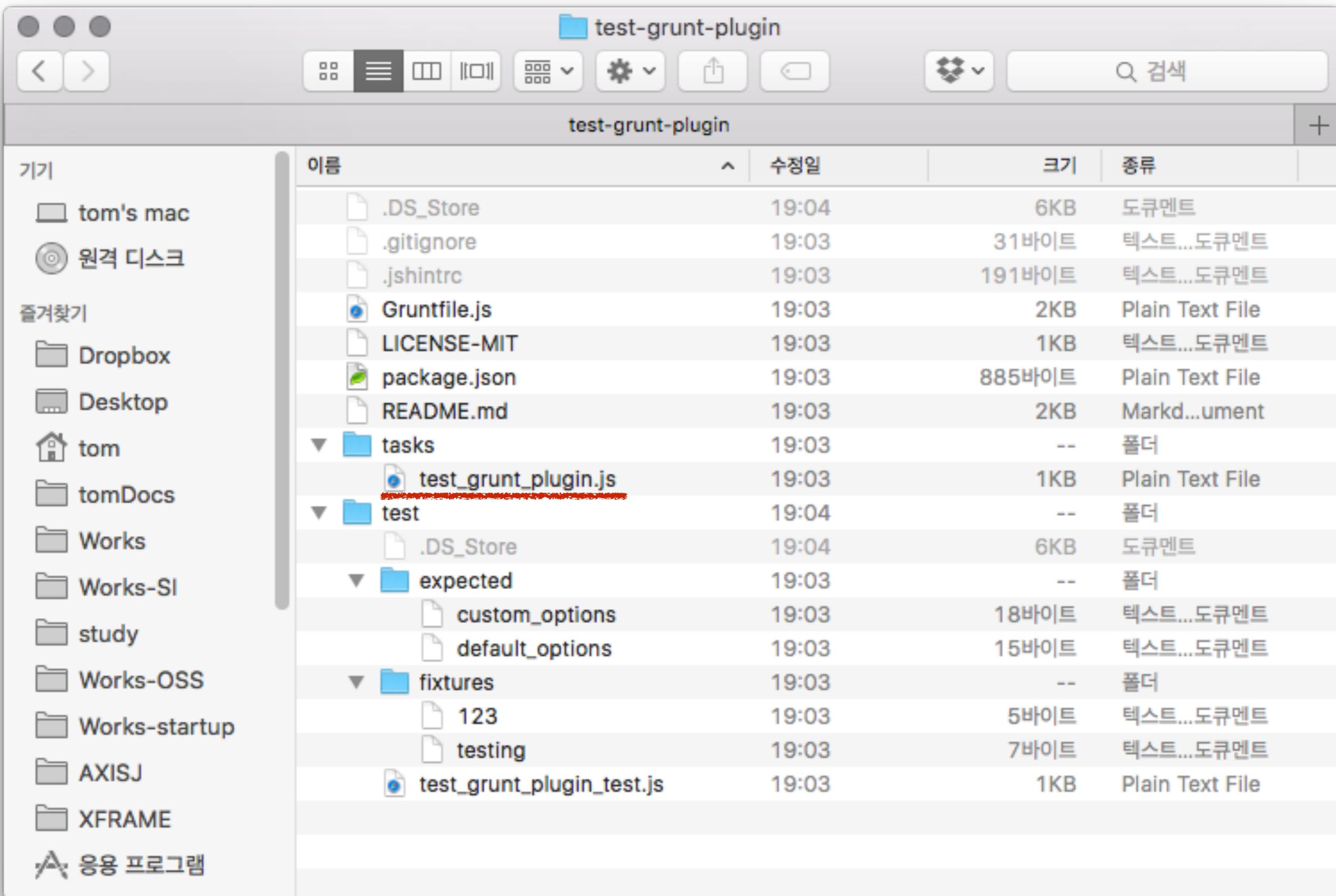
```
{  
  "name": "grunt-ax-marko",  
  "description": "marko template render",  
  "version": "0.1.10",  
  "homepage": "https://github.com/thomasJang/grunt-ax-marko",  
  "dependencies": {  
    "marko": "^2.0.0"  
  },  
  "devDependencies": {  
    "grunt-contrib-jshint": "^0.9.2",  
    "grunt-contrib-clean": "^0.5.0",  
    "grunt-contrib-nodeunit": "^0.3.3",  
    "grunt": "~0.4.5"  
  },  
  "peerDependencies": {  
    "grunt": "~0.4.5"  
  },  
  "keywords": [  
    "gruntplugin", "marko", "grunt-marko"  
  ]  
}
```

npm install  
AXISJ.com



# Gruntfile.js

```
module.exports = function (grunt) {
  grunt.initConfig({
    ax_marko: {
      default: {
        options: {preserveWhitespace: true},
        files: [{
          src_root: "test",
          src: "test/fixtures/*.html",
          global_data: {
            layout_path: "../layouts/basic.marko"
          },
          lang: {
            ko: "test/lang/ko.json", en: "test/lang/en.json"
          },
          dest: "test/expected",
          output_extension: "html"
        }]
      }
    })
  });
  grunt.loadTasks('tasks');
}
```



# tasks/ax\_marko.js

```
var marko = require('marko');

module.exports = function(grunt) {
  grunt.registerMultiTask('ax_marko', '', function() {
    var options = this.options({}); // options에 선언한 속성

    this.files.forEach(function(f) {
      // files 속성 사용
    });
  });
};
```

# tasks/ax\_marko.js

```
1 this.files.forEach(function(f) {  
2   var src = f.src.filter(function(filepath) {  
3     if (grunt.file.isDir(filepath)) return false;  
4     if (!grunt.file.exists(filepath)) {  
5       grunt.log.warn('Source file "' + filepath + '" not found.); return false;  
6     }  
7     else { return true;}  
8   });  
9  
10  src.forEach(function(filepath) {  
11    var tmpl = marko.load(filepath), dest_filename;  
12  
13    dest_filename = filepath.substr(f.src_root.length);  
14    dest_filename = dest_filename.substring(0, dest_filename.lastIndexOf('.'));  
15  
16    for (lang in lang_view) {  
17      for (var k in f.global_data) lang_view[lang][k] = f.global_data[k];  
18  
19      tmpl.render(lang_view[lang], function(err, output) {  
20        if (!err)  
21          grunt.file.write(  
22            f.dest + '/' + lang + dest_filename + "." + f.output_extension,  
23            output  
24          );  
25        else grunt.log.error(err);  
26      });  
27  
28    } // end for  
29  }); // end src.forEach  
30}); //end this.files.forEach
```

# Build Demo



GRUNT

grunt-ax-marko

needless pachouli manufacture

npm On-Site npm Private Packages npm Open Source documentation support

find packages

thomasjang log out

grunt-ax-marko public

marko template render

AXISJ.com Contributed Seewoo Mondo&Thomas

marko template render

Getting Started

This plugin requires Grunt ~0.4.5

If you haven't used Grunt before, be sure to check out the Getting Started guide, as it explains how to create a Gruntfile as well as install and use Grunt plugins. Once you're familiar with that process, you may install this plugin with this command:

```
npm install grunt-ax-marko --save-dev
```

Once the plugin has been installed, it may be enabled inside your Gruntfile with this line of JavaScript:

```
grunt.loadNpmTasks('grunt-ax-marko');
```

The "ax\_marko" task

Overview

In your project's Gruntfile, add a section named ax\_marko to the data object passed into `grunt.initConfig()`.

```
grunt.initConfig({
  ax_marko: {
    default: {
      options: f
```

★ npm install grunt-ax-marko

thomasjang published 3 months ago

0.1.10 is the latest of 10 releases

github.com/thomasJang/grunt-ax-marko

MIT license

Collaborators

Stats

0 downloads in the last day

39 downloads in the last week

151 downloads in the last month

No open issues on GitHub

No open pull requests on GitHub

Try it out

Test grunt-ax-marko in your browser.

Keywords

grunt-marko, marko, gruntplugin



# gulp-marko-ax5

newts prefer ms-dos      npm On-Site    npm Private Packages    npm Open Source    documentation    support

find packages      thomasjang log out

## ★ gulp-marko-ax5 public

Render marko templates

AXISJ.com Contributed Sewoo Mondo&Thomas

Render marko template  
marko website is <http://markojs.com/>

```
##Install
```

`npm install gulp-marko-ax5 --save-dev`

### Usage

`src/greeting.html`

```
Hello ${data.name}!

<ul if="notEmpty(data.colors)">
  <li style="color: $color" for="color in data.colors">
    $color
  </li>
</ul>
<div else>
  No colors!
</div>
```

`gulpfile.js`

```
var gulp = require('gulp');
var marko_ax5 = require('gulp-marko-ax5');
```

`npm install gulp-marko-ax5`

thomasjang published 17 minutes ago

0.3.0 is the latest of 5 releases

[github.com/thomasJang/gulp-marko-ax5](https://github.com/thomasJang/gulp-marko-ax5)

MIT license

### Collaborators

+

### Stats

66 downloads in the last day

66 downloads in the last week

66 downloads in the last month

No open issues on GitHub

No open pull requests on GitHub

### Try it out

Test gulp-marko-ax5 in your browser.

### Keywords

precompile, rendering, render, html, compile, template, marko, gulpplugin

```
/// grunt
grunt.initConfig({
  copy: {
    files: [{
      src: 'build/app.js',
      dest: 'build/dist/app.js'
    }]
  }
});
grunt.registerTask('build', ['copy']);
```

# Grunt

```
/// gulp
var gulp = require('gulp');
var sass = require('gulp-sass');

//declare the task
gulp.task('sass', function(done) {
  gulp.src('./scss/ionic.app.scss')
    .pipe(sass())
    .pipe(gulp.dest('./www/css/'))
    .on('end', done);
});
```

## Gulp



자~! 이제 시작해 볼까



Chequer  
판매등록

전체 11 미전송 11 보류 1 통신 ON  
담당자 관리자 POS 03051 거래번호 0012

ver 0.3.0

2015/07/13 (월) 0 오전 12:18:14

핫도그(단품)	핫도그 콤보	콤보 음료 변경	콤보 커피 변경	^
커피	차&라떼	음료	사이드메뉴	▼
플레인	칠리덕	스테프핫도그	치즈온불고기	^
3,000	3,700	3,900	3,900	
치즈온골드덕	치즈온미트칠리	프렌치오리지널	프렌치불고기	^
3,900	3,900	4,500	4,500	
프렌치칠리덕	바이킹	치즈덕	샤워덕	
4,500	4,800	4,800	4,800	
바비큐		콤보음료추가		▼
4,800		1,000		

번호	품목	단가	수량	금액	할인
1	프렌치오리지널	4,500	1	4,500	0
2	치즈덕	4,800	1	4,800	0
3	바이킹	4,800	1	4,800	0
4	치즈온미트칠리	3,900	1	3,900	0

바코드입력

바코드를 입력하세요

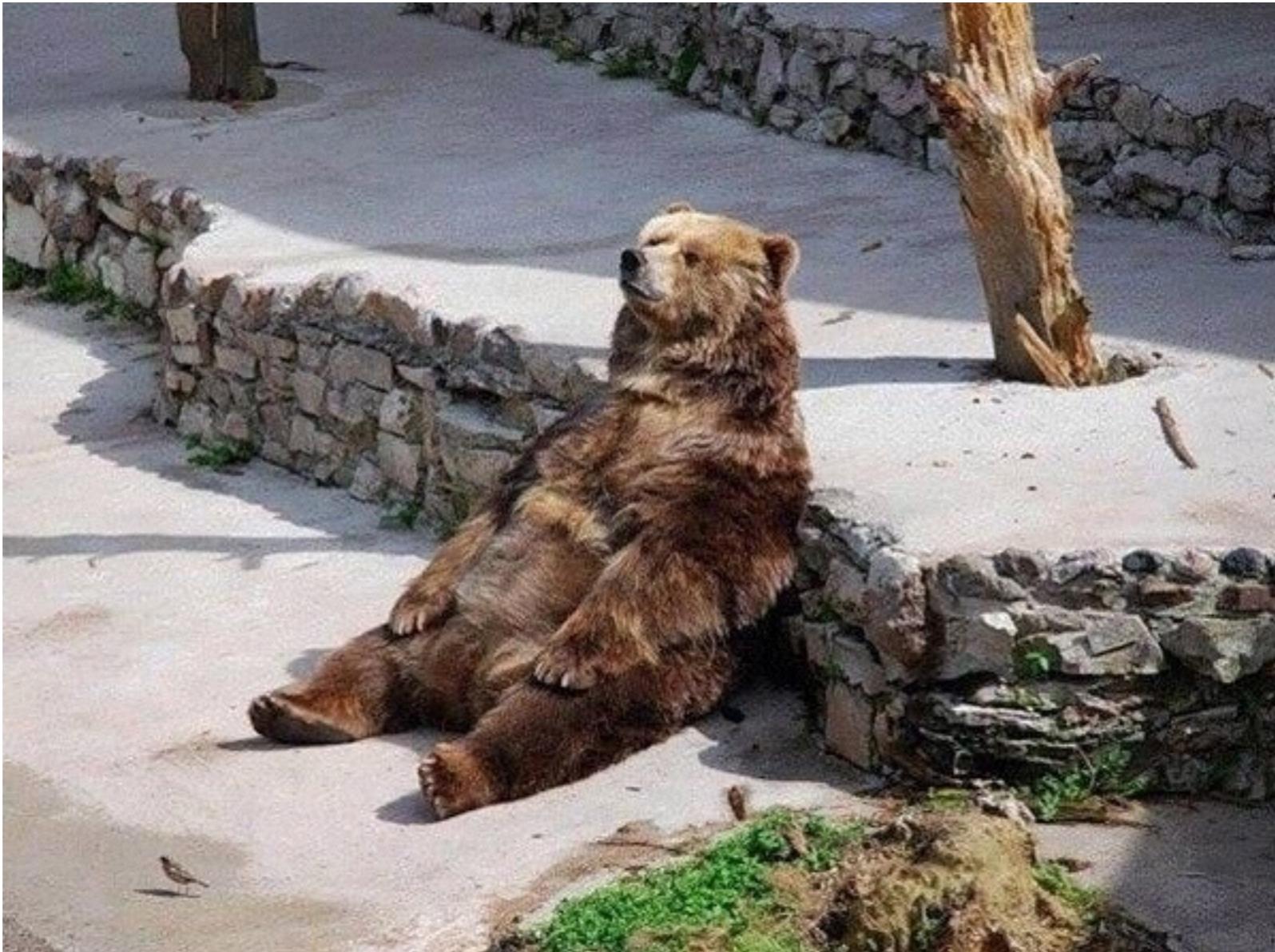
000006:"치즈온미트칠리" 추가

보류/해제	품목조회	일괄취소
할인		
현금영수증	거래내역	결제
기타메뉴	▶ 나가기	

총판매액	18,000	결제내역
할인금액	0	
받을금액	18,000	
받은금액	0	
거스름돈	-18,000	



데모까지 제작했으나. 시장조사 부족  
“POS를 만들어도 팔기 어렵다.” (개발중단)



• • • •



이걸 꼭 제대로 돌려보고 싶은데..

AXISJ를 좋아하는  
개발자 H군



컨설팅회사  
대표 A씨



S그룹 전임원  
B씨



소개



레저큐 대표  
M씨

소개

소개

가자고 서비스를 리뉴얼  
해주실 수 있겠습니까?



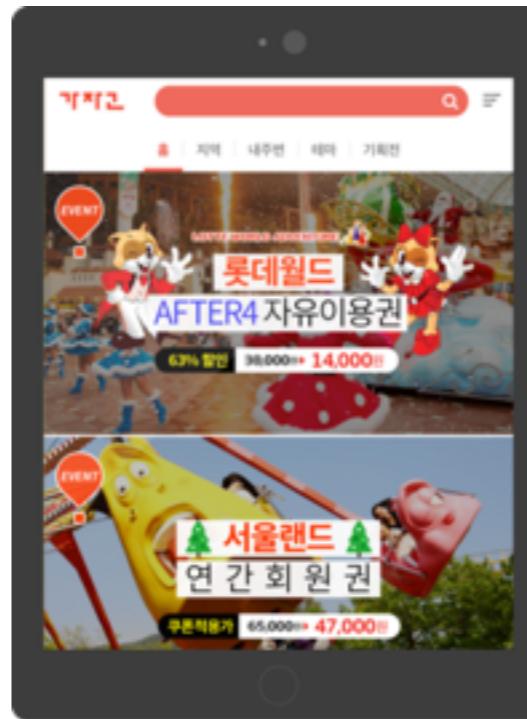
# 가자고 우리나라 여행 레저 추천 서비스

- 2014년 12월 런칭
- 회원수 4만명
- MAU(Monthly Active User) 30만
- 월평균 거래액 2억원
- 판매/구매/예약 프로세스가 일원화된 플랫폼
- 온라인/모바일 통합 시스템
- 판매자(파트너) 관리 시스템

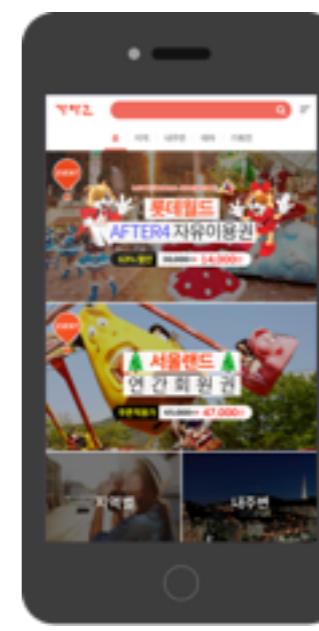
## Desktop



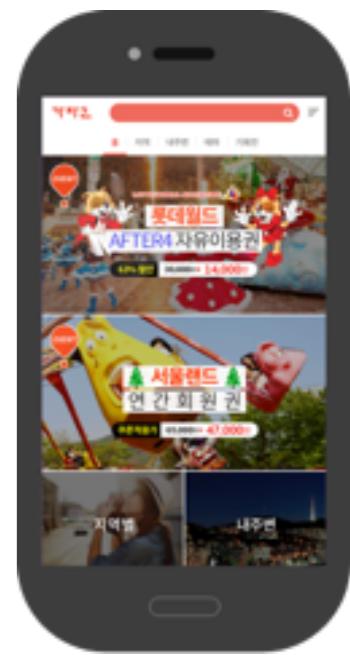
## Mobile



iOS



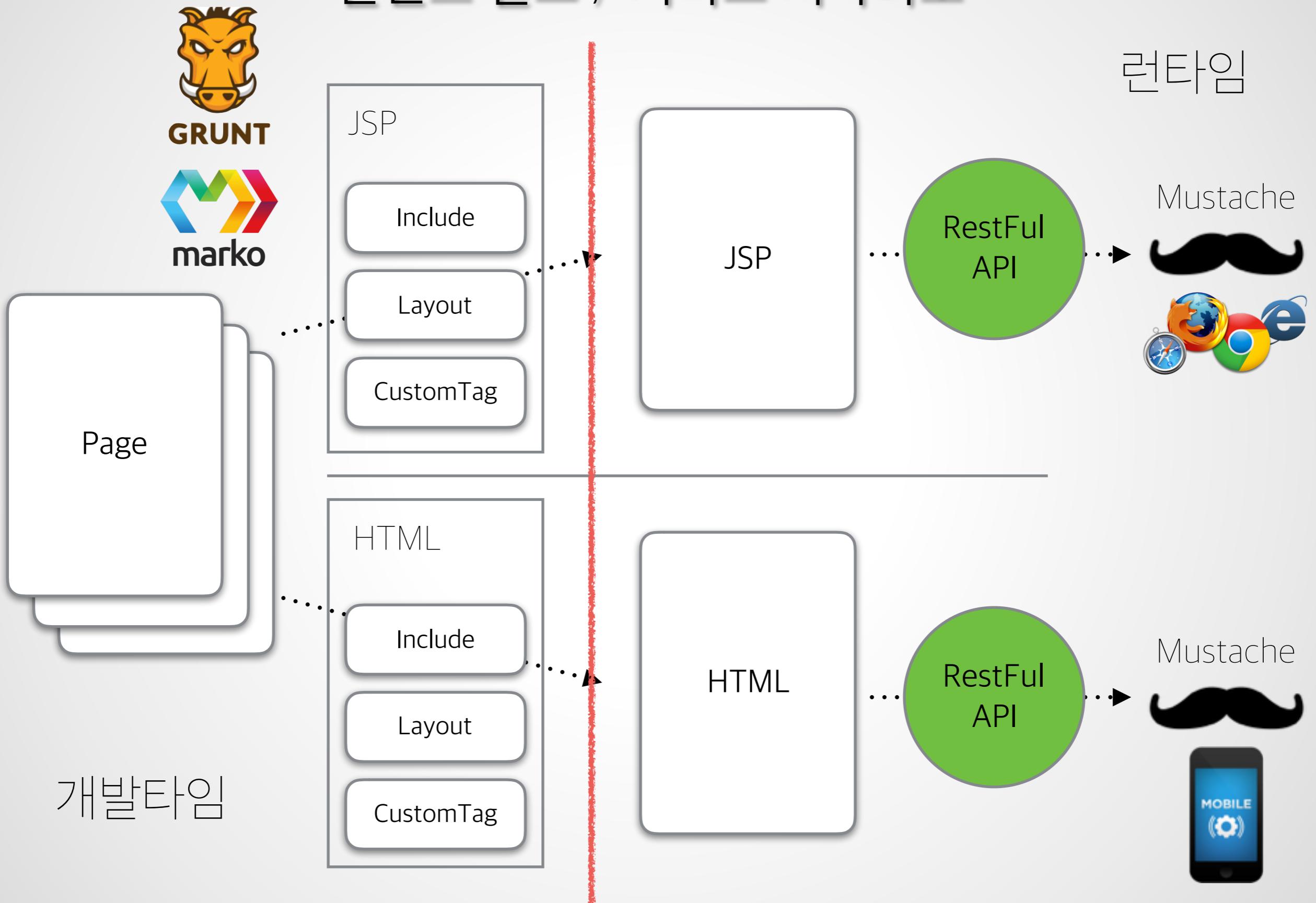
Android





훌훌 털고 ~~ 가자고 서비스 개발시작. 제대로 써보자

# 컨텐츠 빌드 / 서비스 시나리오



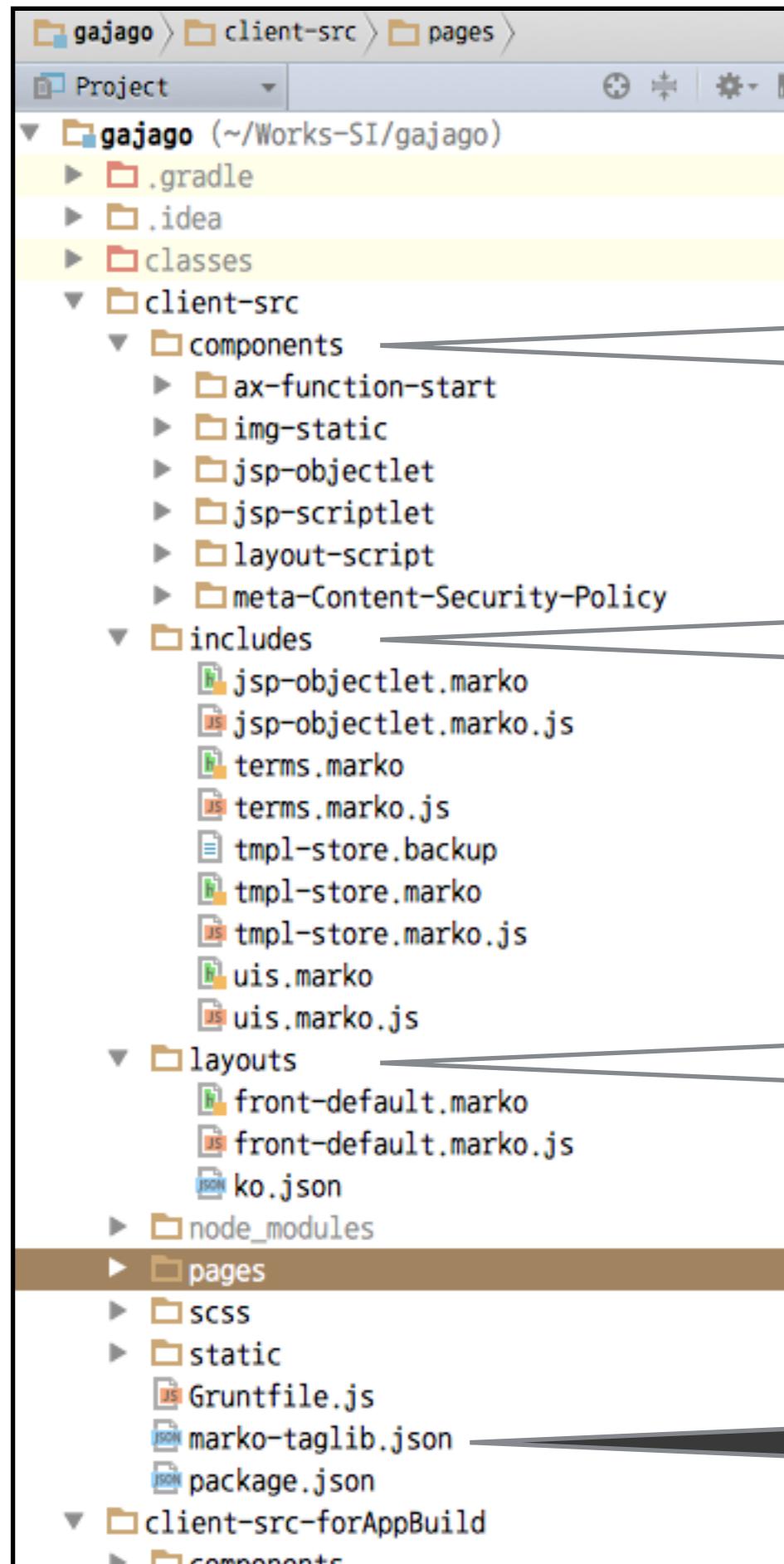
# Mustache는 안 좋다더니 ?

- ✓ Mustache는 API에 의해 동적으로 변경되어야 하는 부분을 처리
  - 가능한 많은 언어에서 재활용 가능
  - 작고 빠르다
  - 믿을 수 있다.
- ✓ 어떠한 일이 있어도 돌아간다.

Testing in Chrome 47.0.2526.106 on Mac OS X 10.11.2

	Test	Ops/sec
Handlebars: compile + render	Handlebars.compile(template)(data);	1,580 ±2.07% 96% slower
Mustache: compile + render	Mustache.clearCache(); Mustache.compile(template)(data);	9,717 ±2.91% 72% slower
Mustache: to_html	Mustache.clearCache(); Mustache.to_html(template, data);	9,919 ±1.62% 72% slower
Handlebars: compile once + render	if (!hb_compiled) { hb_compiled = Handlebars.compile(template); } hb_compiled(data);	35,200 ±5.10% fastest
Mustache: compile once + render	if (!mc_compiled) { Mustache.clearCache(); mc_compiled = Mustache.compile(template); } mc_compiled(data);	22,924 ±0.72% 35% slower
Handlebars: render only	hb_compiled(data);	31,776 ±3.70% 10% slower
Mustache: render only	mc_compiled(data);	22,993 ±0.67% 35% slower

# Project 구조



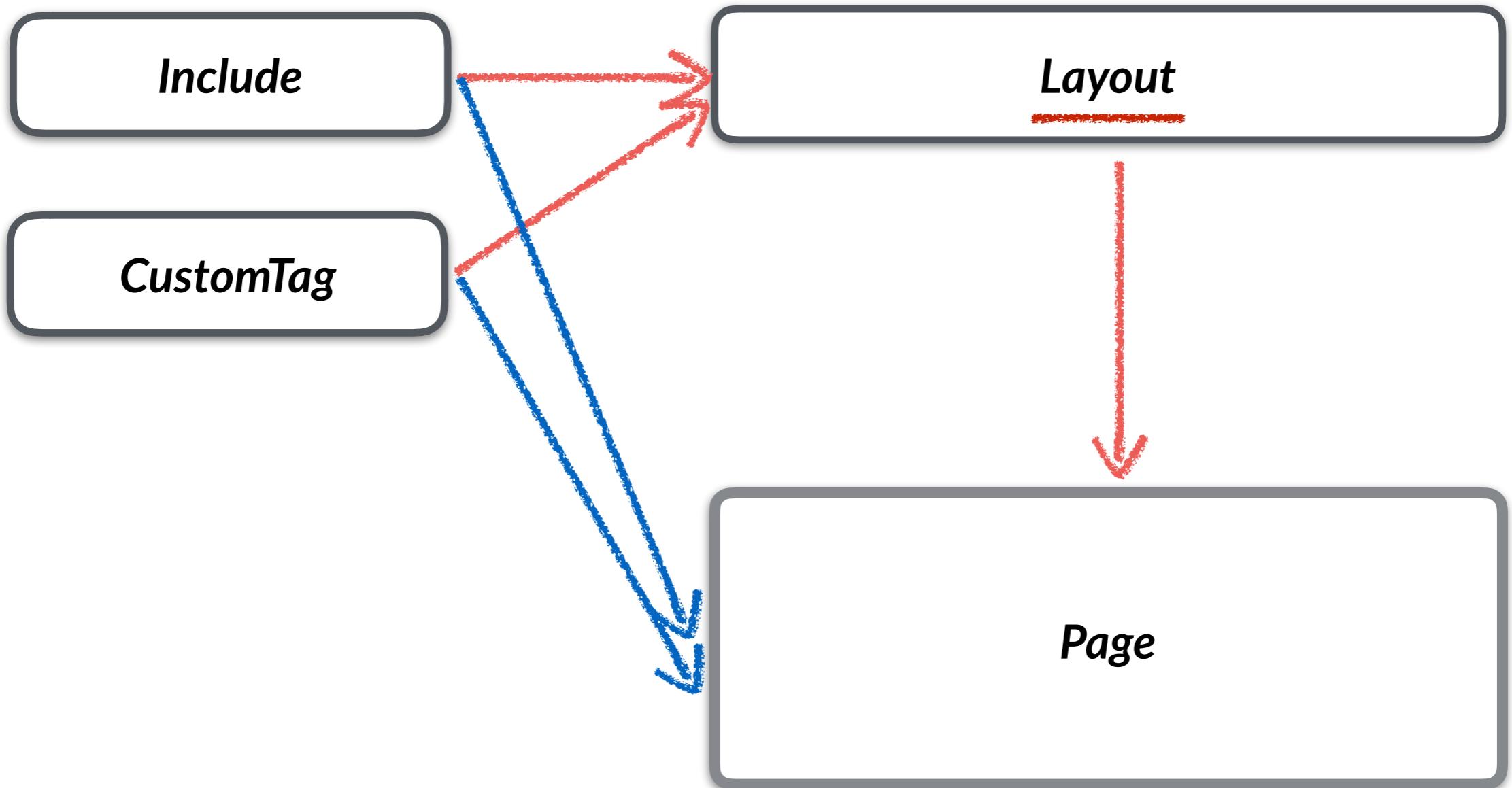
customTag

include

layout

템플릿 페이지

```
{  
  "tags-dir": "components"  
}
```



# 레이아웃 샘플

```
<!DOCTYPE html>
<html lang="ko">
<head>
  <meta charset="UTF-8">
  <title>대한민국 어디든, 가지고</title>
  <script type="text/javascript"
    src="app.js?dest=${data.timeserial}"></script>
  <include template="../includes/jsp-objectlet.marko" name="use"/>
  <layout-placeholder name="head-css"/>
  <layout-placeholder name="head-js"/>
</head>
<body>
<div class="app-contents" id="app-contents">
  <div class="client-body ${data.toolbar}">
    <h1 class="page-title" if="data.showTitle === true">
      <layout-placeholder name="title"/>
    </h1>
    <layout-placeholder name="body"/>
  </div>
</div>
<layout-placeholder name="page-js"/>
</body>
</html>
```

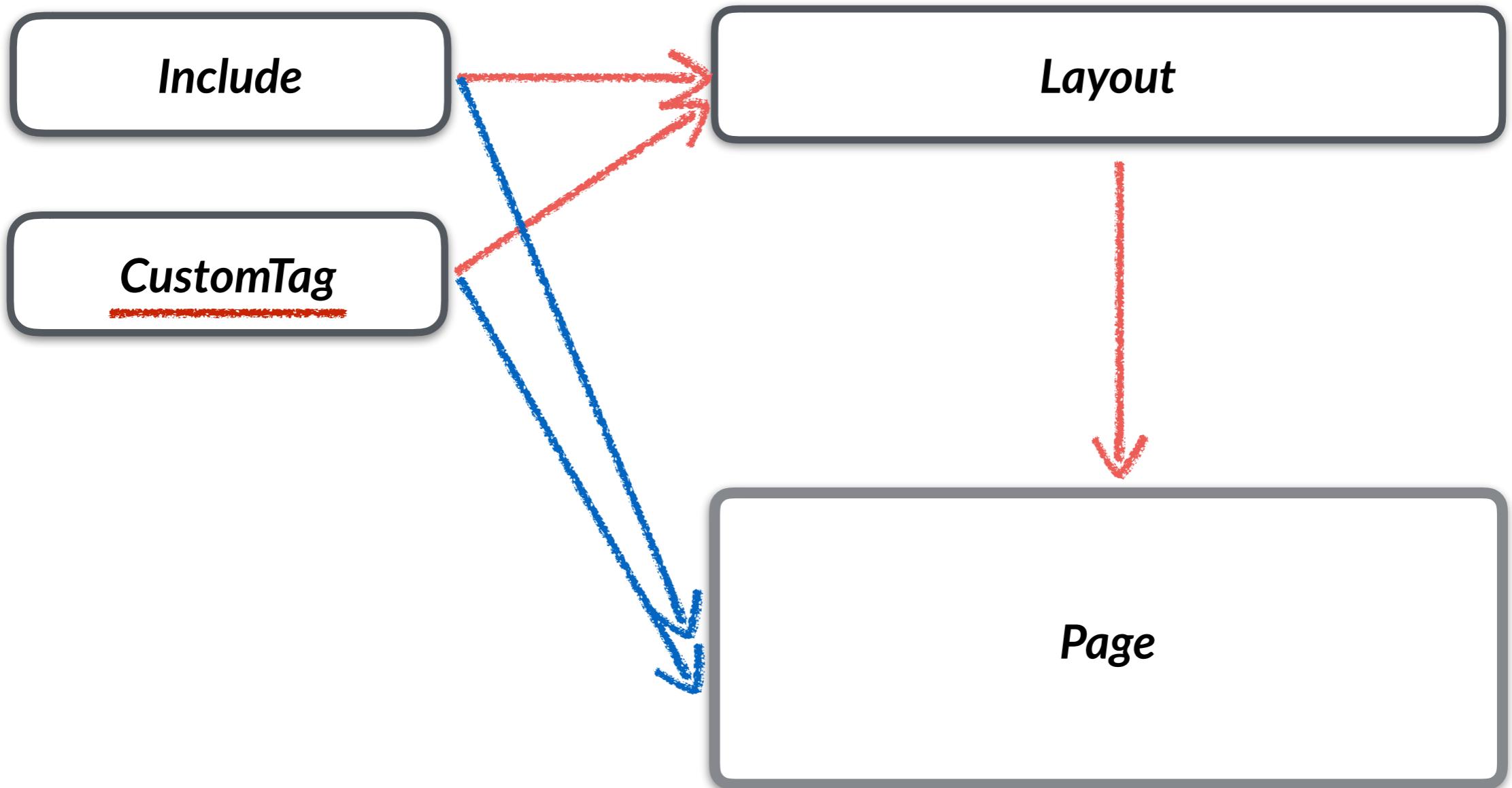
# PAGE

```
<jsp-scriptlet></jsp-scriptlet>
<layout-use template="${data.layout_path}" timeserial="${data.timeserial}">
<layout-put into="body">
    <!-- rendered html target -->
    <div class="home-view">
        <div id="print-target-01"></div>
        <div id="print-target-02"></div>
    </div>

    <div id="tmpl-target">
        <include template="../../includes/tmpl-store.marko" name="TOP_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TILE_2C_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TOP_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="2C_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="DEAL-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="COUPON-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="POST-ITEM"/>
    </div>
</layout-put>

<layout-put into="end">
    <layout-script src="main/home-view.js"></layout-script>
</layout-put>

</layout-use>
```



# PAGE > customTag

```
<jsp-scriptlet></jsp-scriptlet>
<layout-use template="${data.layout_path}" timeserial="${data.timeserial}">

<layout-put into="body">
    <!-- rendered html target -->
    <div class="home-view">
        <div id="print-target-01"></div>
        <div id="print-target-02"></div>
    </div>

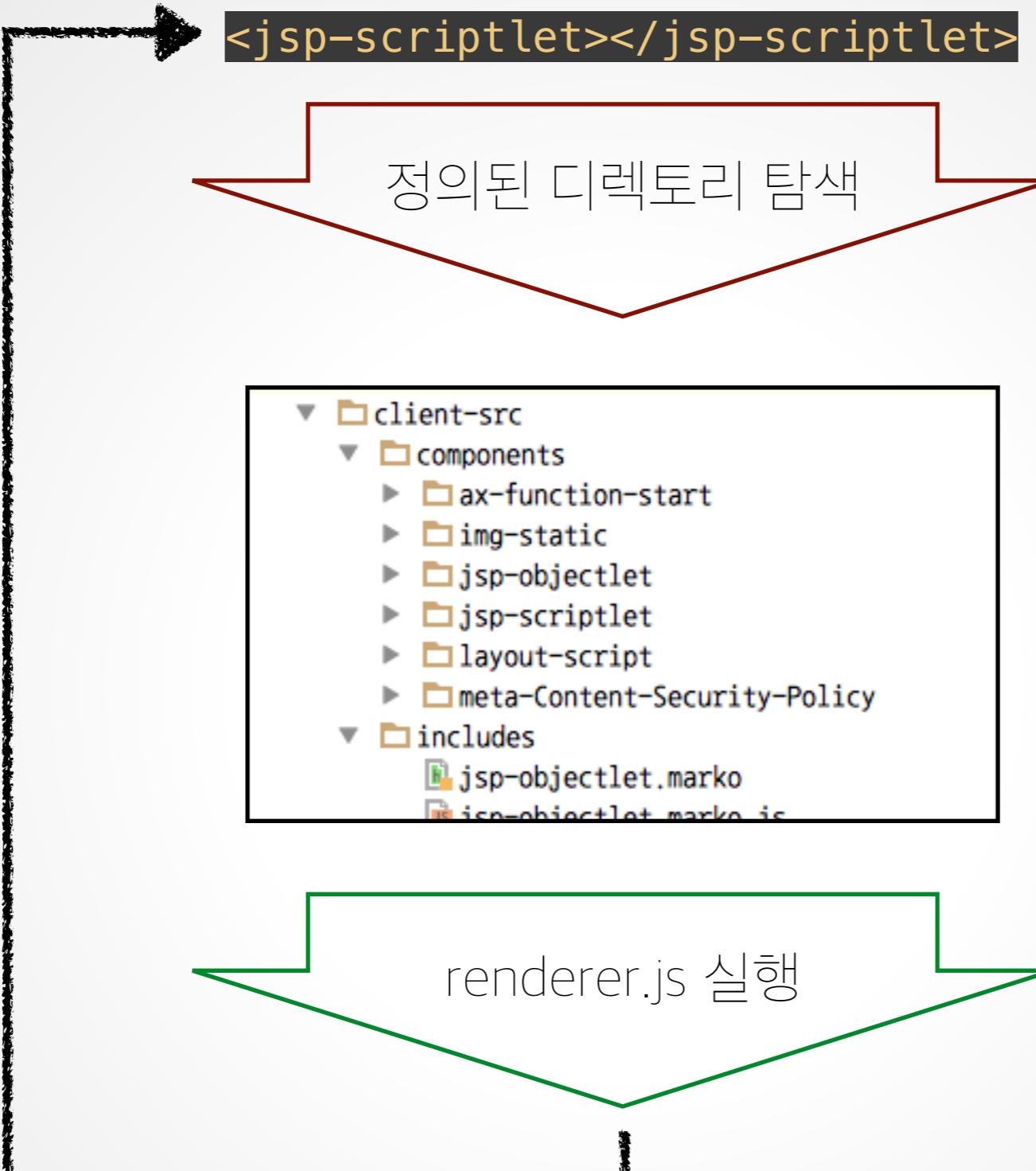
    <div id="tmpl-target">
        <include template="../../includes/tmpl-store.marko" name="TOP_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TITLE_2C_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TOP_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="2C_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="DEAL-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="COUPON-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="POST-ITEM"/>
    </div>
</layout-put>

<layout-put into="end">
    <layout-script src="main/home-view.js"></layout-script>
</layout-put>

</layout-use>
```

Custom Tag

결과 치환



customTag 처리방식

# components/jsp-scriptlet/renderer.js

```
exports.render = function (input, out) {
    // input = attributes, out = function
    out.write('<%@ page contentType="text/html; charset=UTF-8" '+
        'language="java" %>');
};
```

# components/jsp-objectlet/renderer.js

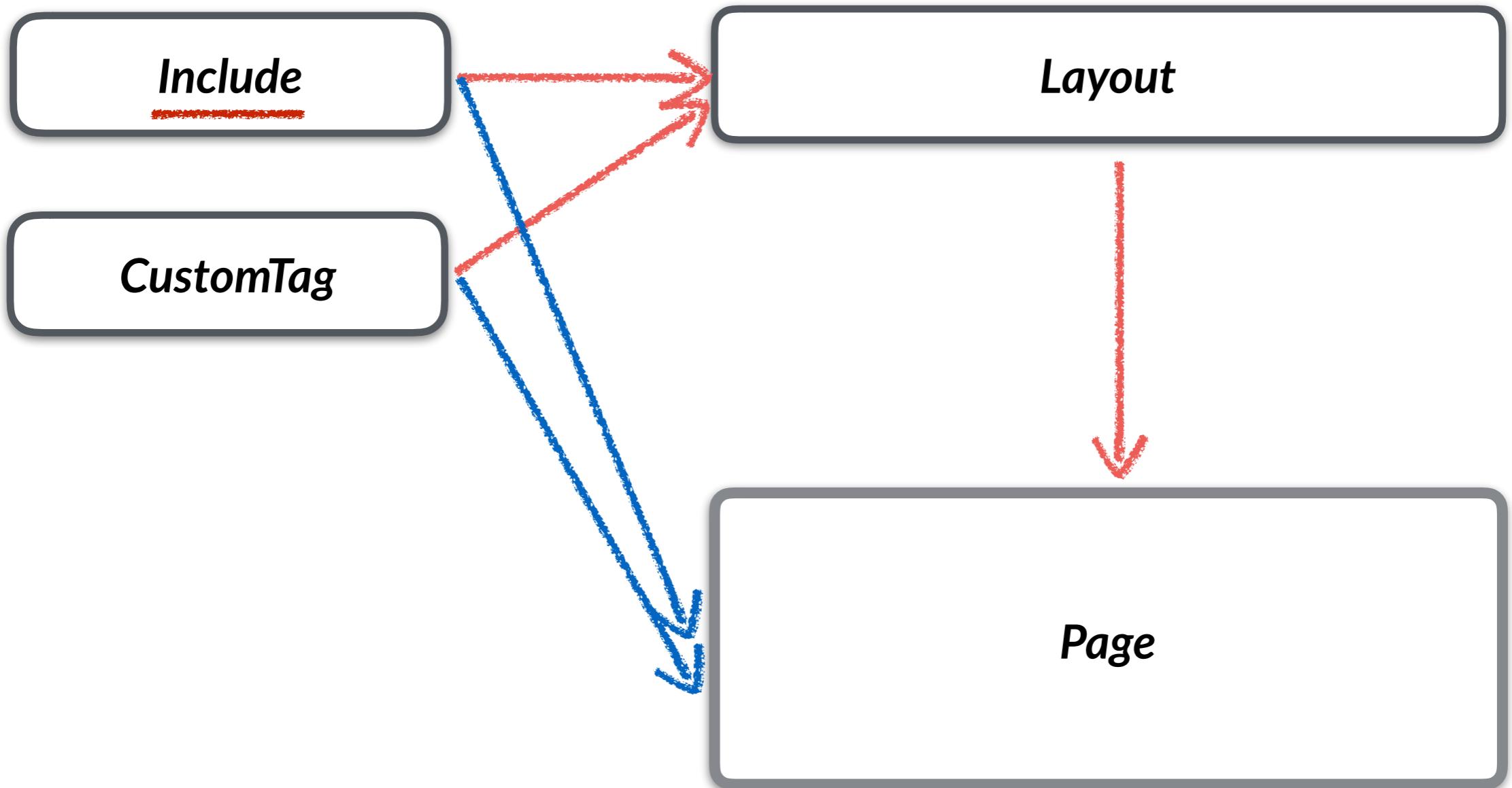
```
exports.render = function (input, out) {
    out.write('<%@ include file="../../common/base.jspf"%>');
};
```

```
exports.render = function (input, out) {
  out.write(
    '<meta http-equiv="Content-Security-Policy" content="default-src *; script-src
    \'self\' \'unsafe-inline\' \'unsafe-eval\' '+
    '127.0.0.1:* '+
    'http:///*/* '+
    'https:///*/* '+
    'http://*.gstatic.com '+
    'http://*.googleapis.com '+
    'https://*.gstatic.com '+
    'https://*.googleapis.com '+
    'http://*.daum.net '+
    'http://*.daumcdn.net '+
    'https://*.nicepay.co.kr '+
    'http://*.nicepay.co.kr '+
    '; '+
    'style-src \'self\' \'unsafe-inline\' '+
    '127.0.0.1 '+
    'http:///*/* '+
    'https:///*/* '+
    'http://*.gstatic.com '+
    'http://*.googleapis.com '+
    'https://*.gstatic.com '+
    'https://*.googleapis.com '+
    'http://*.daum.net '+
    'http://*.daumcdn.net '+
    'https://*.nicepay.co.kr '+
    'http://*.nicepay.co.kr '+
    '">');
};
```

# Cordova 용 meta tag

# CustomTag에서 nodeJS 사용

```
exports.render = function(input, out) {  
    var fs = require('fs');  
    var md = require('markdown-it')();  
    var Finder = require('fs-finder');  
    var htmlparser = require("htmlparser");  
  
    out.write(  
        fs.readFileSync(  
            'src/ax5docs/assets/include/ax5ui-plugins.inc', 'utf8'  
        );  
};
```



# gajago/home-view.html

```
<jsp-scriptlet></jsp-scriptlet>
<layout-use template="${data.layout_path}" timeserial="${data.timeserial}">

<layout-put into="body">
    <!-- rendered html target -->
    <div class="home-view">
        <div id="print-target-01"></div>
        <div id="print-target-02"></div>
    </div>

    <div id="tmpl-target">
        <include template="../../includes/tmpl-store.marko" name="TOP_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TILE_2C_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TOP_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="2C_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="DEAL-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="COUPON-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="POST-ITEM"/>
    </div>
</layout-put>

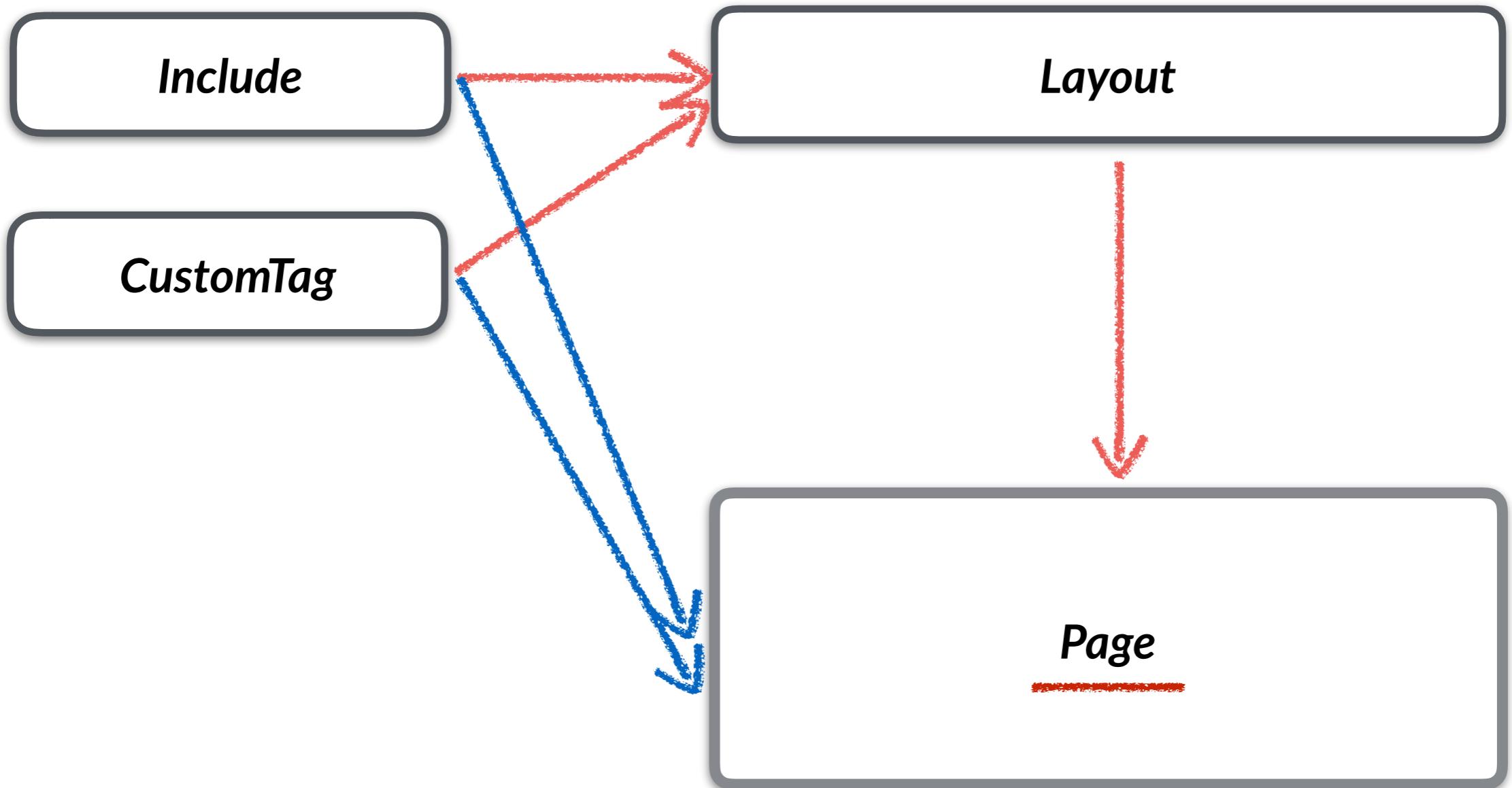
<layout-put into="end">
    <layout-script src="main/home-view.js"></layout-script>
</layout-put>

</layout-use>
```

# include/tmpl-store.marko

```
<div if="data.name == 'DAUM-MAP'>
  <script type="text/javascript" src="//apis.daum.net/maps/maps3.js?
apikey=362020f21637*****" data-min-disable="true"></script>
</div>

<script type="text/html" data-gajago-tmpl="TOP_IMG" if="data.name ==
'TOP_IMG'">
  <div class="category-layout-TOP_IMG" id="div-slider-target-{{__i__}}">
    <div class="ax5-ui-div-slider" data-ax5-ui="div-slider">
      <div class="slider-holder">
        {{#list}}
          <div class="slider-item">
<div class="img-box"
style="background-image: url({{srcPath}});"
data-item-index="{{__i__}}" data-link-url="{{url}}></div>
          </div>
        {{/list}}
      </div>
    </div>
  </div>
</script>
```



# gajago/home-view.html

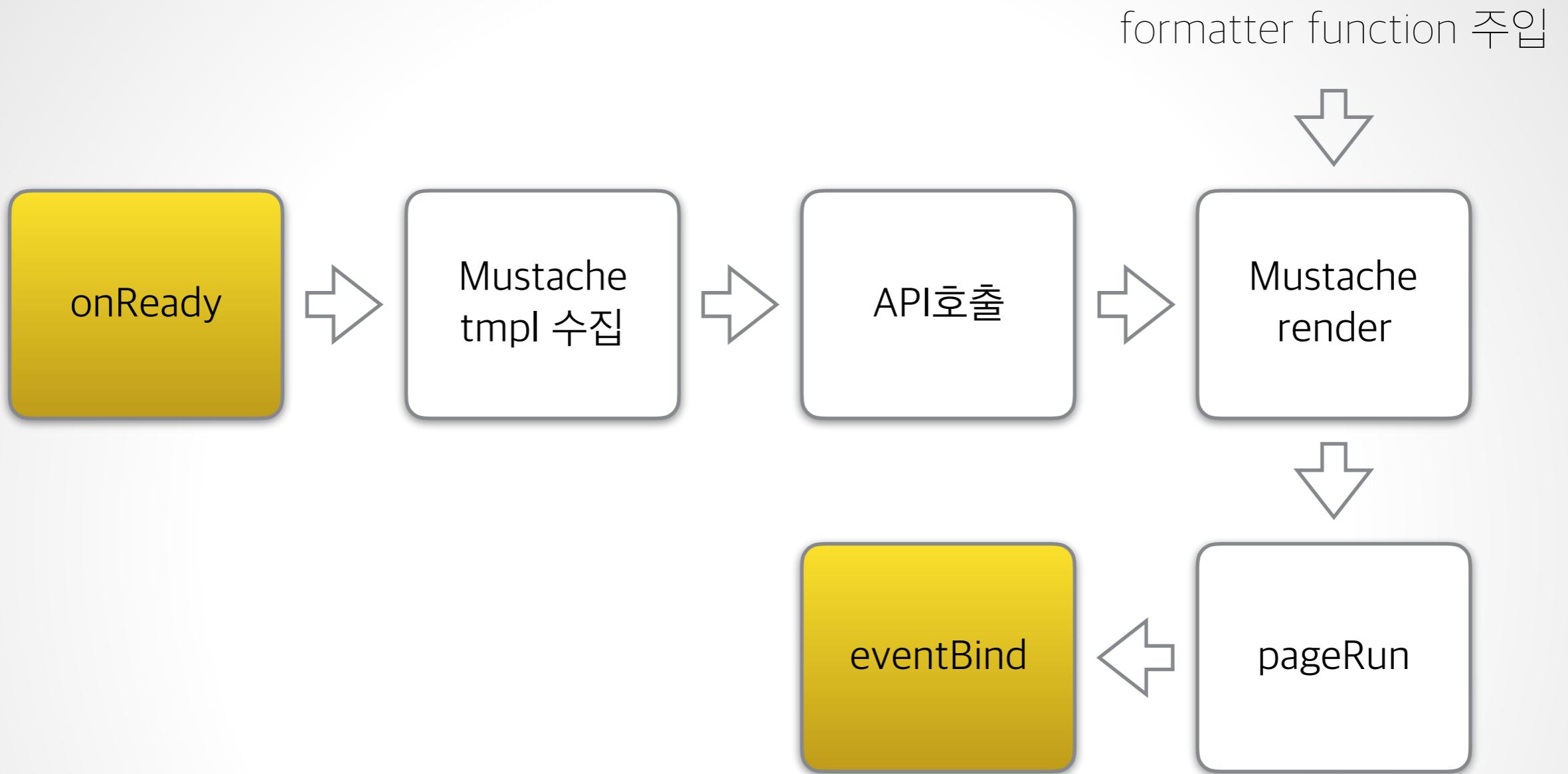
```
<jsp-scriptlet></jsp-scriptlet>
<layout-use template="${data.layout_path}" timeserial="${data.timeserial}">

<layout-put into="body">
    <!-- rendered html target -->
    <div class="home-view">
        <div id="print-target-01"></div>
        <div id="print-target-02"></div>
    </div>

    <div id="tmpl-target">
        <include template="../../includes/tmpl-store.marko" name="TOP_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TILE_2C_IMG"/>
        <include template="../../includes/tmpl-store.marko" name="TOP_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="2C_VIDEO"/>
        <include template="../../includes/tmpl-store.marko" name="DEAL-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="COUPON-ITEM"/>
        <include template="../../includes/tmpl-store.marko" name="POST-ITEM"/>
    </div>
</layout-put>

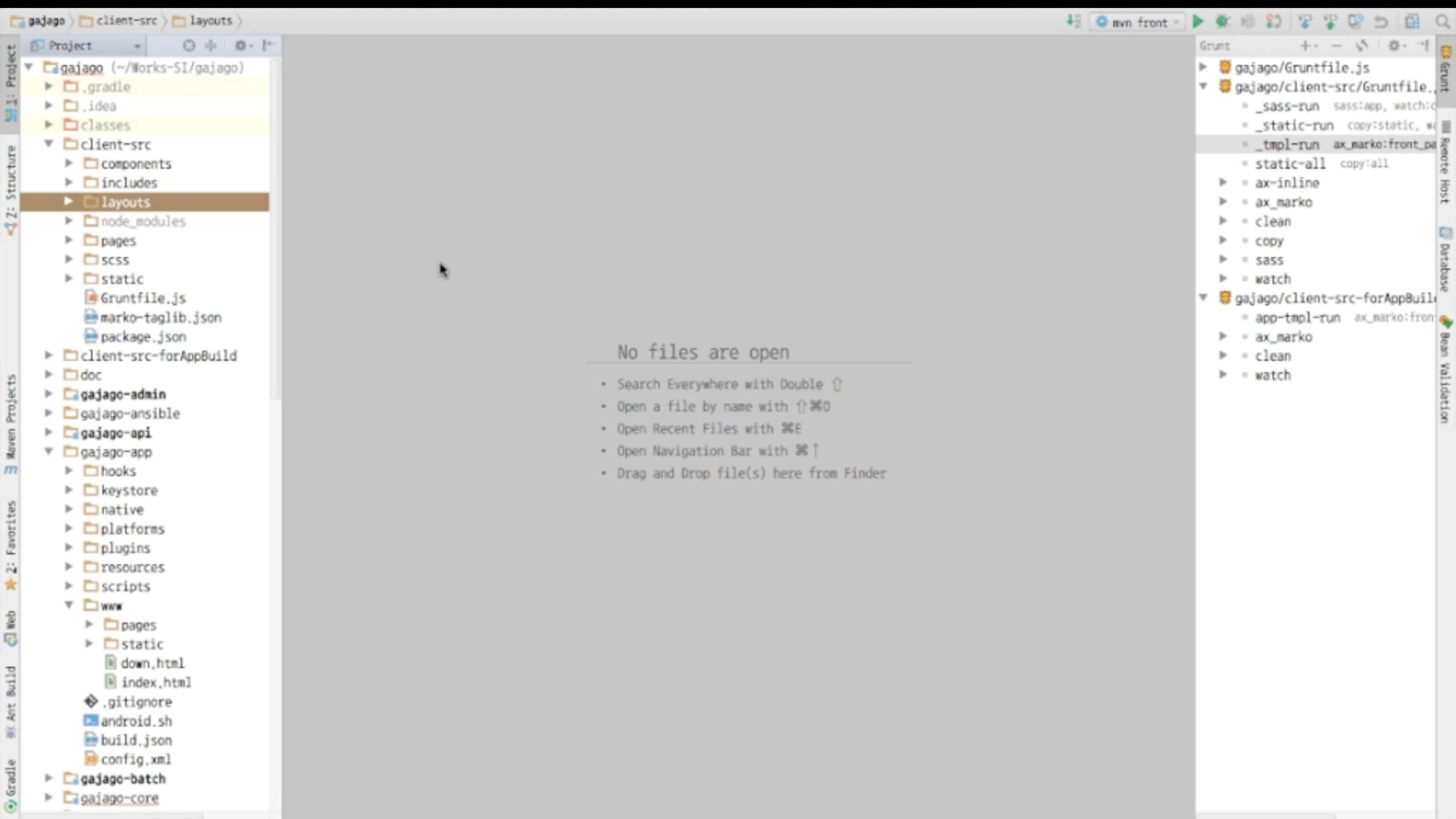
<layout-put into="end">
    <layout-script src="main/home-view.js"></layout-script>
</layout-put>

</layout-use>
```



## 클라이언트 JS 랜더링 프로세스

# Build Demo



# gulpfile.js

```
/*
 * template render
 */
gulp.task('MARK0:complie', function () {
  gulp.src(PATHS.src.page + '**/*.html')
    .pipe(changed(PATHS.www.page))
    .pipe(marko_ax5(
      {
        timeserial: (new Date).getTime(),
        layout_path: PATHS.src.layout + "/front-default.marko"
      },
      {
        extension: 'jsp'
      }
    ))
    .pipe(gulp.dest(PATHS.www.page));
});

gulp.task('default', function () {
  gulp.watch(PATHS.src.page + '**/*.html', ['MARK0:complie']);
});
```

# 후기

- ‘앱’은 잘 될거야 하고, ‘웹’만 개발하다 앱스토어 등록 7일전에 확인했다 개고생..  
(생각보다 앱은 만만하지 않았음 2주는 여유 필요 ~ )
- 공동 개발을 할 때나, Branch간에 merge 할 때, 가끔 git conflict 나는 문제 발생.  
(ignore 처리하고 jenkins에서 빌드전에 task실행)

# 정리

- 개발타임에는 marko 템플릿 랜더링
- 런타임에는 Mustache 템플릿 랜더링
- Layout, Include, customTag를 이용하여 용도별로 다르게  
빌드
- 왠만한 플러그인은 직접 만드는 일도 어렵지 않다.

# 감사합니다.



[github.com/axisj](https://github.com/axisj)

[facebook.com/axisj](https://facebook.com/axisj)

[www.axisj.com](http://www.axisj.com)