



Gulp.js

node.js 기반의 task runner Gulp.js를 소개합니다.

UI개발3팀 기민진

Task Runner?

- 반복적인 작업을 스크립트를 통해서 수행하게 해주는 front-end 자동화 도구
- 귀찮은 일은 다 맡겨라.



v0.4.5 Release, dev v0.4.6

많은 커뮤니티 보유



v3.9.0 Release





문법적으로 쉽고 간결





빠르다





대세는 gulp?





gruntjs / **grunt**





Releases Tags

on 21 Jun 2014  **_pr1170_author_head** ...
 416a573  zip  tar.gz

on 13 May 2014  **v0.4.5** ...
 e6f9cdf  zip  tar.gz





on 31 Mar 2014  **_pr1108_author_head** ...
 a85a304  zip  tar.gz





on 13 Mar 2014  **v0.4.4** ...
 bfc869e  zip  tar.gz





on 8 Mar 2014  **v0.4.3** ...
 8bbc8ac  zip  tar.gz





gulpjs / **gulp**





Releases Tags

on 2 Jun  **v3.9.0** ...
 657213a  zip  tar.gz

on 10 Feb  **v3.8.11** ...
 84df40b  zip  tar.gz

on 4 Nov 2014  **v3.8.10** ...
 0203bcc  zip  tar.gz

on 22 Oct 2014  **v3.8.9** ...
 b7486d8  zip  tar.gz

on 8 Sep 2014  **v3.8.8** ...
 8f505c9  zip  tar.gz

gulp도 있을건 다있다.

The image displays two screenshots of the npm (Node Package Manager) website. The top screenshot shows the search results for 'grunt', with 14782 results. The first result is 'grunt' by 'cowboy', described as 'The JavaScript Task Runner', with 380 stars and version v0.4.5. The bottom screenshot shows the search results for 'gulp', with 9507 results. The first result is 'gulp' by 'phated', described as 'The streaming build system', with 528 stars and version v3.9.0. Both screenshots include the npm logo, a search bar, and links to 'sign up or log in'.

grunt cowboy
The JavaScript Task Runner
★ 380 v0.4.5
task, async, cli, minify, uglify, build, lodash, unit, test, qunit, nodeunit, server, init, scaffold, make, jake, tool
[View all 32...](#)

gulp phated
The streaming build system
★ 528 v3.9.0
build, stream, system, make, tool, asset, pipeline
[View all 32...](#)

<https://www.npmjs.com/>



the streaming build system

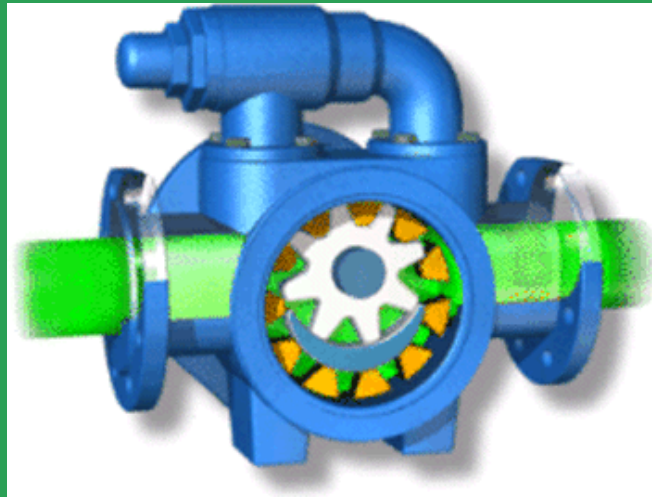
gulp.js

- stream 기반으로 빠르다.
- 자유로운 코드 작성 가능
- task를 병렬 진행 할수 있다.

```
gulp.task('foo', ['bar', 'baz']);  
//foo태스크가 실행되기 전에 'bar'와 'baz' 태스크가 병렬로 진행
```

stream

- 데이터의 연속적인 흐름
- event-driven, non-blocking I/O
- readable, writable 2가지 type이 존재



Vinyl

- gulp가 변환하는 가상 파일 포맷
- plugin에서 다음 plugin으로 전달
- vinyl-source-stream, vinyl-buffer



```
gulp.src(['src/**/*.css']) //stream
  .pipe(...) //vinyl객체로 전달
  .pipe(gulp.dest('dist')); //vinyl객체를 실제 파일로 변환
```

Piping

```
gulp.pipe(...)
```

- 읽어들이는 파일의 내용(stream)을 다른 task에 전달

```
gulp.src('src/**/*.css')  
  .pipe(/* task */)  
  .pipe(/* task */)  
  .pipe(gulp.dest('src/dist'));
```



Install

```
$npm init
```

```
$npm install --global gulp
```

```
$npm install --save-dev gulp
```

<http://gulpjs.com/>

Basic

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

gulp.task('default', function() {
  // place code for your default task here
});
```

gulpfile.js

\$gulp

plugin

```
$npm install --save-dev gulp-cssmin
```

```
var cssmin = require('gulp-cssmin');  
  
.pipe(cssmin({  
  keepBreaks : true  
}))
```

gulpfile.js

task
src
watch
dest

gulp.task

```
gulp.task('name', ['deps'], function () {  
  // ...  
});
```

gulpfile.js

```
$gulp name
```

gulp.task

```
gulp.task('name', function () {  
  // ...  
});
```

gulpfile.js

```
$gulp name
```


gulp.src

```
gulp.src('src/**/*.css') //단일경로
```

```
gulp.src(['src/**/*.css', 'src/**/*.test.css']) //멀티경로
```

```
gulp.src(['src/**/*.css', '!src/**/*.test.css']) //제외
```

gulp.dest

```
gulp.src(['src/**/*.css'])  
  .pipe(...)  
  .pipe(gulp.dest('src/dist'));
```

gulpfile.js

task

```
var gulp = require('gulp');
var cssmin = require('gulp-cssmin');
var rename = require('gulp-rename');

gulp.task('minify', function () {
  return gulp.src('/*.css')
    .pipe(cssmin())
    .pipe(rename({
      suffix: '.min'
    }))
    .pipe(gulp.dest('dist'))
  ;
});
```

gulpfile.js

```
$gulp minify
```

gulp.watch

```
gulp.watch('src/**/*.css', ['task', 'task2']);
```

gulpfile.js

gulp.watch

```
gulp.task('watch', function () {  
  //src 디렉토리 안에 css 확장자를 가진 파일이 변경되면  
  //cssmin task 실행  
  gulp.watch('src/css/*.css', ['cssmin']);  
});  
  
gulp.task('cssmin', function(){  
  // task  
  gulp.src('src/css/*.css')  
    .pipe(cssmin())  
    .pipe(gulp.dest('src/dist/css'));  
});
```

gulp.watch

```
$gulp watch
```

```
[18:50:56] Starting 'watch'...  
[18:50:56] Finished 'watch' after 6.84 ms  
[18:51:02] Starting 'cssmin'...  
[18:51:02] Finished 'cssmin' after 5.87 ms
```

gulp-load-plugins

```
$npm install --save-dev gulp-load-plugins
```

```
var gulp = require('gulp'),
    $ = require('gulp-load-plugins');

gulp.task('default', function () {
  return gulp.src('src/**/*.css')
    .pipe($.cssmin())
    .pipe($.rename({
      suffix: '.min'
    }))
    .pipe(gulp.dest('dist'));
});
```

run-sequence

```
var gulp = require('gulp'),
    cssmin = require('gulp-cssmin'),
    jsmin = require('gulp-jsmin'),
    jsdoc = require("gulp-jsdoc"),
    imagemin = require('gulp-imagemin');

// build css
gulp.task('css:build', function(){
  // task
});

// build js
gulp.task('js:build', function(){
  // task
});
```


run-sequence

```
$npm install --save-dev run-sequence
```

```
var gulp = require('gulp'),
    cssmin = require('gulp-cssmin'),
    jsmin = require('gulp-jsmin'),
    jsdoc = require("gulp-jsdoc"),
    imagemin = require('gulp-imagemin'),
    runSequence = require('run-sequence');

gulp.task('build', function() {
  runSequence('css:build',
    ['js:build', 'js:doc'],
    'img:build',
    function(){
      console.log("task complete.");
    },
    ..
```

run-sequence

```
$npm gulp build
```

```
[18:43:49] Starting 'build'...  
[18:43:49] Starting 'css:build'...  
[18:43:49] Finished 'css:build' after 46 µs  
[18:43:49] Starting 'js:build'...  
[18:43:49] Finished 'js:build' after 8.44 µs  
[18:43:49] Starting 'js:doc'...  
[18:43:49] Finished 'js:doc' after 2.31 µs  
[18:43:49] Starting 'img:build'...  
[18:43:49] Finished 'img:build' after 2.03 µs  
task complete.  
[18:43:49] Finished 'build' after 2.71 ms
```

```
Process finished with exit code 0
```

test

sass - autoprefixer - watch



grunt task

```
npm install --save-dev grunt-contrib-watch grunt-contrib-sass
```

```
module.exports = function(grunt) {  
  grunt.initConfig({  
    pkg: grunt.file.readJSON('package.json'),  
    sass: {  
      dist: {  
        files: [{  
          expand: true,  
          cwd: 'src/scss',  
          src: ['*.scss'],  
          dest: 'src/css',  
          ext: '.css'  
        }]  
      }  
    },  
    autoref: {  
      autoref: {  
        src: 'src/scss',  
        dest: 'src/css',  
        ext: '.css'  
      }  
    }  
  });  
  grunt.loadNpmTasks('grunt-contrib-sass');  
  grunt.loadNpmTasks('grunt-contrib-watch');  
  grunt.registerTask('default', ['sass', 'autoref']);  
  grunt.registerTask('watch', ['watch:sass', 'watch:autoref']);  
  grunt.registerTask('build', ['sass', 'autoref', 'watch']);  
}
```



gulp task

```
var gulp = require('gulp'),
    sass = require('gulp-sass'),
    autoprefixer = require('gulp-autoprefixer');

//watch
gulp.task('watch', function() {
  gulp.watch('src/scss/**/*.scss', ['styles']);
});

//style
gulp.task('styles', function() {
  return gulp.src(['src/scss/**/*.scss'])
    .pipe(sass().on('error', sass.logError))
    .pipe(autoprefixer('last 2 version', 'safari 5', 'ie 8', 'ie 9', 'opera 12.1', 'firefox 36'))
    .pipe(gulp.dest('src/css'));
});
```

result



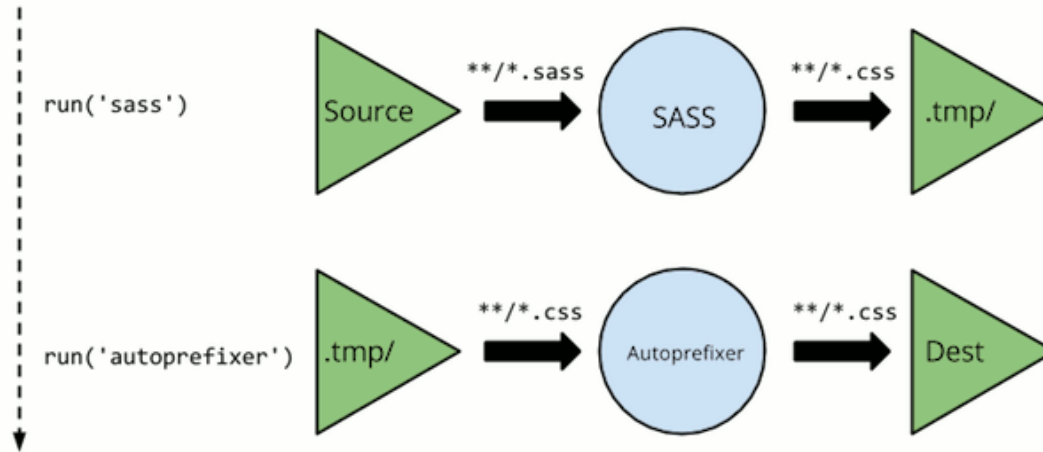
Completed in 1.472s



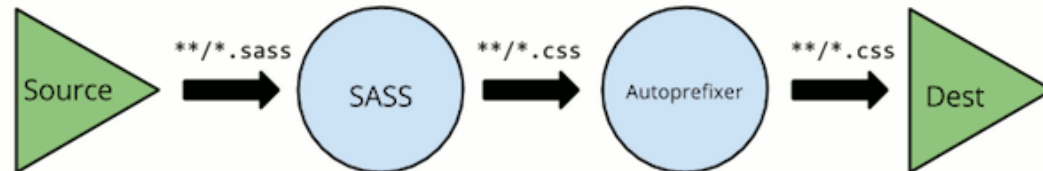
Finished 'styles' after 203 ms

result

Grunt

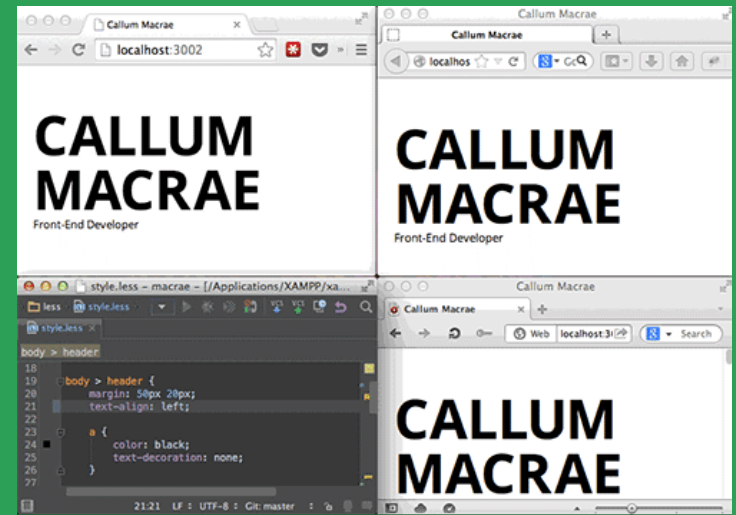
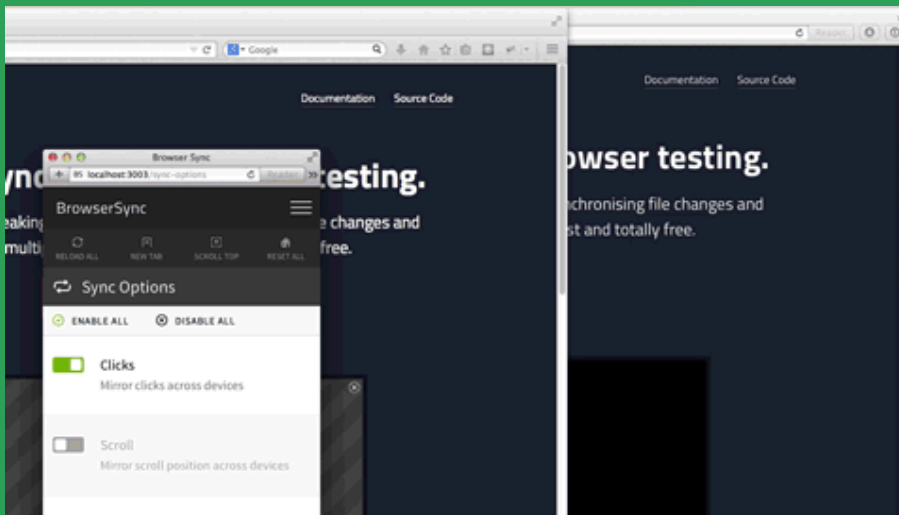


Gulp



browsersync + gulp

browsersync



<http://www.browsersync.io/>

결론

- gulp는 grunt보다 빠르다.
- 구글링하면 자료는 많다.
- browsersync는 사랑이다.

써보세요!

감사합니다.