# Gulp & Sass

Task Runner & CSS Preprocessor

# Gulp

- All about automation

- Improves your workflow

- http://gulpjs.com/

# Sass

- **Syntactically Awesome Stylesheets**

- Initially designed by Hampton Catlin, and developed by Natalie Weizenbaum.

- Maintained by Natalie and Chris Eppstein.

- http://sass-lang.com/

# Installs

*npm install -g gulp*

*npm init*

*npm install --save-dev gulp*

*npm install --save-dev gulp-sass*

# Setup Gulp

- **Gulpfile.js**

- Add dependencies using require()

  - Since Gulp runs on Node

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

*var sass = require('gulp-sass');*

# Gulp tasks

- Gulp has some basic tasks that you can leverage

  - **task**     // register a new task

  - **pipe**     // add a new plugin or function into a task

  - **start**     // kick off a bunch of tasks

  - **watch**   // watch files and run task when on change

  - **dest**     // where things get put at end of task

# Gulp task for Sass

- **Gulpfile.js**

```
gulp.task('styles', function() {

    gulp.src('sass/**/*.scss')

        .pipe(sass().on('error', sass.logError))

        .pipe(gulp.dest('./css/'))

});
```

# Add a scss file into your project

- mkdir sass

- cd $_

- touch main.scss

- add some stuffs

# Gulp styles

- will convert .scss to .css for you.

# Include the css file in index.html

- touch index.html

- include css reference

- add some placeholder copy

  - *div*4>lorem*5*

# Gulp watch

```
//Watch task

gulp.task('default',function() {

    gulp.watch('sass/**/*.scss',['styles']);

});
```

# Browser Sync and Gulp

- BrowserSync - the evolution of LiveReload

- http://www.browsersync.io/docs/gulp/

*npm install browser-sync gulp --save-dev*

# Add to Gulpfile.js

```
var browserSync = require('browser-sync').create();
```

# Syncing Changes to browser

- **Streams** are supported in Browsersync, so you can call **reload** at specific points during your tasks and all browsers will be informed of the changes.

- Because Browsersync only cares about your CSS when it's finished compiling - **make sure you call .stream() after gulp.dest**

# Add Browser Sync Task

```
// Static Server + watching scss/html files

gulp.task('serve', ['sass'], function() {

    browserSync.init({

        server: "./"

    });

    gulp.watch("sass/**/*.scss", ['sass']);

    gulp.watch("*.html").on('change', browserSync.reload);

});
```

# Combine Sass with Browser Sync

```
// Compile sass into CSS & auto-inject into browsers

gulp.task('sass', function() {

    return gulp.src("sass/**/*.scss")

        .pipe(sass().on('error', sass.logError))

        .pipe(gulp.dest("./css/"))

        .pipe(browserSync.stream());

});

gulp.task('default', ['serve']);
```

# It works!

- But all the *.scss files are converted to CSS

- We just want one file, styles.css

# Gulp concat to the rescue!

- Will concatenate all your css into a single file

*npm install gulp-concat -- save-dev*

# Include dependency in Gulpfile.js

*var concat = require('gulp-concat');*

# Add it into Sass task

```
// Compile sass into CSS & auto-inject into browsers

gulp.task('sass', function() {

  return gulp.src("sass/**/*.scss")

    .pipe(sass().on('error', sass.logError))

    .pipe(concat('styles.css'))

    .pipe(gulp.dest("./css/"))

    .pipe(browserSync.stream());

});
```

# Update css reference in index.html

*<link rel="stylesheet" href="css/styles.css">*