Gulp

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# Getting Started with Gulp

Gulp is a Node.js-based task runner. It helps us check, concatenate and minify JS, compile our Sass to Css,…

Tutorial: <https://travismaynard.com/writing/getting-started-with-gulp>

# Using Gulp in our project

## Where is gulp in our project?

There are some files in static folder (/Sharecare/web/web/src/main/webapp/static) we need to attend:

* **package.json**: provides information of our project and helps manage ours dependencies. Gulp and its plugins are declared here.
* **gulpfile.js**: where we define tasks of our project. But the tasks don’t write directly on this file, they are written on “./gulp/tasks” and gulpfile.js create a reference to them.
* **config.js** (./gulp/config.js): it contain configurations of tasks especially the paths of src and dest folders when we run these tasks.

Tasks are grouped and written in JS files as css.js, copy.js,… Java script tasks is put on “scripts” folder. Following is the analyze structure of css.js:

|  |  |
| --- | --- |
| var gulp = require('gulp'),  autoprefixer = require('gulp-autoprefixer'),  csso = require('gulp-csso'),  header = require('gulp-header'),  gulpif = require('gulp-if'),  notify = require('gulp-notify'),  … | Including the gulp core and plugins associated with tasks. |
| …  gulp.task('css-optimize', ['css-compile'], function(cb) {  if (!env.rc) {  return cb();  }  return gulp.src(config.cssFileSrc)  .pipe(autoprefixer())  .pipe(header(banner.text, banner.data))  .pipe(gulp.dest(config.cssDest));  });  … | gulp.task(‘task\_name’, [‘task\_1’,’task\_2’],function(){…},…);  The first parameter is the name of task, next parameters can be other tasks or functions defined for this task. |

## Default task

Default task be called by command:

|  |
| --- |
| gulp |

Default task will run **build** task. Therefore, when we call “**gulp build**”, it will do the same thing when we run default task “**gulp**”.

When we run “**gulp**” or “**gulp build**”, only **copy** task run. Copy task copies JS and CSS files to target folder. If you want rebuild resources, using this command:

|  |
| --- |
| gulp build --skip false |

## Compiling CSS file

First, you need installing **compass**. You can check by the command:

|  |
| --- |
| compass version |

To install **compass**, using these command:

|  |
| --- |
| gem update --system  gem install compass |

Compile SCSS file to CSS file:

|  |
| --- |
| gulp css |

Rebuild static resources:

|  |
| --- |
| gulp |

## Compiling templates (.coffee to .js)

|  |
| --- |
| gulp templates  gulp |

## Checking JS files

Lint task checks any JS files and makes sure there are no errors.

|  |
| --- |
| gulp lint |

## Environment variable

**env.js** (./gulp/util/env.js) checks **process.env.NODE\_ENV** variable to let we know the project is in rc or development environment.

On rc environment, css files will be optimized, JS file will be concatenated and minified.

## Concatenating and minifying JS

In development, the tasks that concatenate and minify JS file will don’t work. They only work on rc environment:

|  |
| --- |
| **gulpif**(env.rc, uglify()) |

There are some JS files created by other files such as: libs.js, head.js. The tasks compile them also run on rc environment. Example compling libs.js:

|  |
| --- |
| gulp libs --env rc |

**libs** task creates libs.js from these JS files below:

|  |
| --- |
| /js/libs/jquery-1.8.3.js,  /js/libs/modernizr.js,  /js/libs/require.js,  /js/conf/requirejsConfig.js',  /js/libs/underscore.js,  /js/libs/backbone.js,  /js/libs/omniture.js,  /js/libs/dfp.js,  /js/libs/googleAnalytics.js,  /js/plugins/jquery.json-2.3.js,  /js/plugins/jquery.fancybox.pack.js,  /js/SC-build.js,  /js/modules/video-center/api/videoCenterBCSmartAPI.js,  /js/modules/global/ajaxSettings.js,  /js/plugins/amc-fixedOnScroll.js,  /js/plugins/amc-followButton.js,  /js/plugins/amc-likeButton.js,  /js/modules/global/globalBindings.js |

**head** task creates head.js from these JS files below:

|  |
| --- |
| /js/libs/jquery-2.1.1.js,  /js/libs/modernizr.js,  /js/libs/underscore.js,  /js/libs/backbone.js,  /js/libs/omniture.js,  /js/libs/require.js,  /js/conf/requirejsConfig.js,  /js/libs/dfp.js,  /js/libs/googleAnalytics.js,  /js/modules/global/ajaxSettings.js,  /js/SC-build.js |

**esi** task creates mobileHeaderESI.js from these JS files below:

|  |
| --- |
| js/plugins/jquery.sc.cookie.js,  js/esi/mobileDesktopToggle.js,  js/esi/mobileHamburgerMenu.js,  js/esi/mobileNavApps.js |