**Learning Gulp**

<http://leveluptuts.com/tutorials/learning-gulp>

other links:

<http://gulpjs.com/>

<https://github.com/gulpjs/gulp/tree/master/docs>

<https://www.youtube.com/playlist?list=PLRk95HPmOM6PN-G1xyKj9q6ap_dc9Yckm>

<https://www.youtube.com/watch?v=dwSLFai8ovQ>

<http://www.smashingmagazine.com/2014/06/building-with-gulp/>

<http://www.sitepoint.com/introduction-gulp-js/>

<https://scotch.io/tutorials/automate-your-tasks-easily-with-gulp-js>

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

<https://code.tutsplus.com/tutorials/managing-your-build-tasks-with-gulpjs--net-36910>

<http://teamtreehouse.com/library/gulp-basics>

**#1 Installing and Introducing Gulp**

* It’s a Build system.
* It can compile js, scss etc.
* Compress/optimize images
* Live reload in browser
* etc

Installation:

* Install node first. <http://nodejs.com> and npm command works.
* Can check by: node -v and npm -v for versions
* npm install -g gulp OR // -g for globally. i.e. all over the machine
* sudo npm install -g gulp // sudo for administrative authority
* gulp -v // check the version after installation to confirm

Now in project:

* specify the path of your project first
* npm install --save-dev gulp // to install gulp directly in our project. Use sudo if this command shows error.
* After installation you see ‘node\_modules’ folder created on your project directory.
* Then Create a gulf file named ‘gulpfile.js’ in the project directory. It’s a set of instruction to tell gulp what you want to do.
* After creating gulpfile as you needed task have been included. Run ‘gulp’ command.
* i.e gulp // enter then run the the task you have written in gulpfile
* you can see the task executed and time it took etc.

**#2 Using Plugins & Minifying JavaScript**

Install plugins through various links.

<http://gulpjs.com/plugins/>

<https://www.npmjs.com/package/gulp-uglify>

gulp-uglify plugin removes unnecessary spaces and make JS file clean. And make size minify.

To install gulp-uglify plugin:

* npm install --save-dev gulp-uglify // we can see documentation in link too.
* After installation you can see ‘gulp-uglify’ folder under ‘node\_modules’ folder.
* Then use ‘require’ and ‘gulp.task..’ in gulpfile.js as before when we create gulfile.
* And use command ‘gulp’ and Enter to process.
* After processing, you can check the js file before and after what have changed i.e. size, file structure etc.
* It automatically create folder that specified in gulp.dest(‘minjs’) and keep the updated JS file.

**#3 Named Tasks**

We can specify any task by it’s name. and run with the name in gulp.

e.g. if the task named with ‘scripts’, we need to run like ‘gulp scripts’ to execute that task.

And we can use name in array in default to use default command ‘gulp’ to execute.

**#4 Watching Files with Gulp**

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

gulp.watch('js/\*.js', ['scripts']);

})

After making ‘Watch’ task, it automatically will be watching tasks you have mentioned in watch function.

Command line is : gulp watch

Like it will compiling scss to css, watching js to minify etc when the file saved.

Ctrl+c to stop watching.

To make watch default:

Go to last line of ‘default’ task and add ‘watch’ task in array.

i.e. gulp.task(‘default’, [‘scripts’, ‘styles’, ‘watch’];

To run the watch, use command only: gulp and Enter.

**#5 Compiling Sass with Gulp**

Install package first: gulp-ruby-sass

<https://www.npmjs.com/package/gulp-ruby-sass/>

try this one too: <https://www.npmjs.com/package/gulp-sass/>

To install before this package, ensure you have installed ruby and sass successfully.

Command is same like before to install this package in Gulp:

npm install --save-dev gulp-ruby-sass

make task like above.

And use gulp default, gulp watch command to compile sass.

Look exercise files and package link to be clear more.

**#6 Keep Gulp Running with Plumber**

‘Plumber’ prevents gulp from stop running just because there is an error somewhere in your code. Without running the ‘gulp’ or ‘watch’ command again and again.

Install Plumber:

<https://www.npmjs.com/package/gulp-plumber>

* npm install --save-dev gulp-plumber
* add the .pipe(plumber()) before every task you want to plumber.
* And it continuously watching with showing errors.

**#7 Handling Errors without Plumber**

Without Plumber working on sass compile method.

Use:

* .on('error', console.error.bind(console)) // to check errors and not to stop compiling
* Or
* .on('error', sass.logError)
* We can make function for it too.
* As now we may not need Plumber.
* You can remove from your project.

**#8 LiveReload with Gulp**

Install LiveReload extension in your browser first.

LiveReload Chorme browser extension:

<https://chrome.google.com/webstore/detail/livereload/jnihajbhpnppcggbcgedagnkighmdlei?hl=en>

on settings checked the ‘Allow access to the file URLs” in Tools>Extensions>livereload.

When the liverReload extension is enable, it seems whole black dot not only border-lined of center.

Then install ‘gulp-livereload’ package:

<https://www.npmjs.com/package/gulp-livereload>

* npm install --save-dev gulp-livereload
* ‘require’
* livereload.listen();
* //this is not working -> Var server = livereload(); on watch task
* .pipe(livereload()); on sass to livereload.
* After done this.
* Run ‘gulp’ or watch command
* After running on command, enable browser extension livereload to active live reloading.

Better than LiveReload. Try it:

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

**#9 Easy Image Compression**

Compress images, remove metadata of images etc using gulp once or every time.

Install gulp-imagemin package:

<https://www.npmjs.com/package/gulp-imagemin>

* npm install --save-dev gulp-imagemin
* same as other packages i.e. require, gulp.task, gulp image, gulp watch, gulp etc
* minifies images

**#10 Automatic Browser Prefixing**

It automatically adds browser prefixes as you run task after saving css or scss file.

Install ‘gulp-autoprefixer’ package:

<https://www.npmjs.com/package/gulp-autoprefixer>

* npm install --save-dev gulp-autoprefixer
* processes are same as other plugin install procedures
* user in sass i.e. styles for now task : .pipe(prefix('last 2 versions')) before gulp.dest
* now run the taks i.e. gulp styles or gulp sass or gulp or gulp watch
* it add prefixes wherever it needed.

**#11 Gulp Resources & What’s Next**

* <http://gulpjs.com/>
* <https://github.com/gulpjs/gulp/blob/master/docs/getting-started.md>

**Continue learning**