

Grunt Tooling

Vintedge Build System

By Gavin

This is not the best and please feel free to improve it and SHARE!!! Even with a non-vintedger.

1. Introduction

1a. Grunt

The JavaScript Task Runner

<https://gruntjs.com/>

1b. Pug Template Engine

Template Engine

<https://pugjs.org/api/getting-started.html>

1c. Stylus CSS language

Expressive, dynamic, robust CSS

<http://stylus-lang.com/>

Do pickup the following skill-set if possible:

Vue.js, React or Angular & PWA

2. Setup

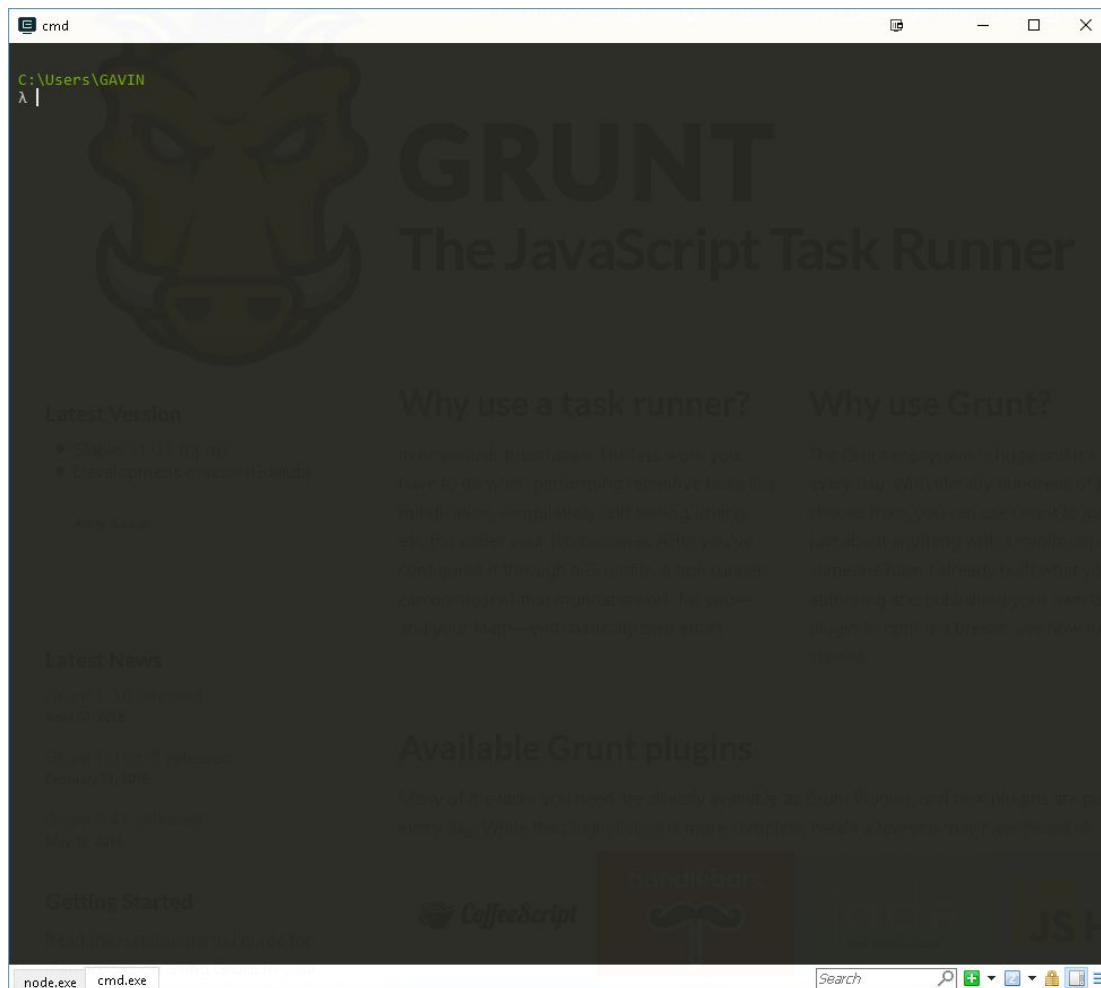
2a. Install a text editor

<https://atom.io/>

You can also use your own favourite editor

2b. Install a portable Console Emulator

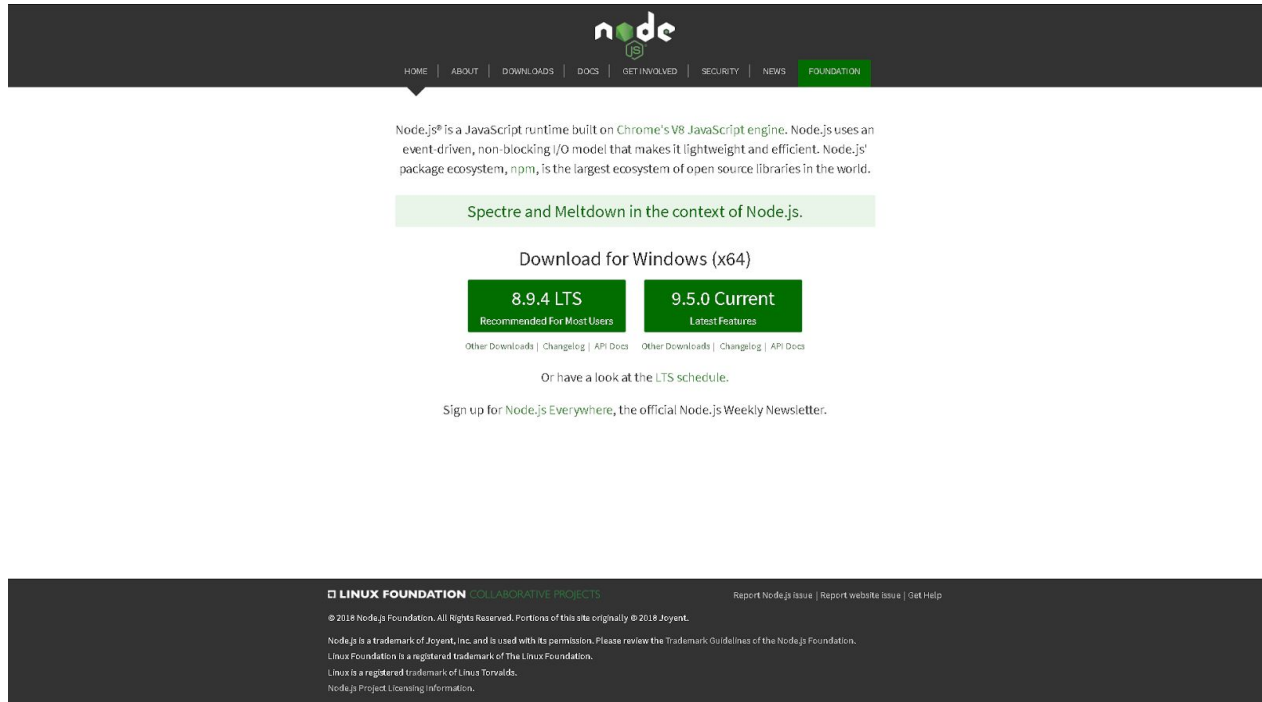
<http://cmdr.net/>



You can also use Windows CMD

2c. Install node.js

<https://nodejs.org/en/>



Just download the LTS version

In case you need multiple version:

<https://www.sitepoint.com/quick-tip-multiple-versions-node-nvm/>

Tips

- a. To check your node version
`node -v`
- b. To check your npm version
`npm -v`
- c. You can install yarn here if you want
<https://yarnpkg.com/en/>

2d. Install Grunt CLI

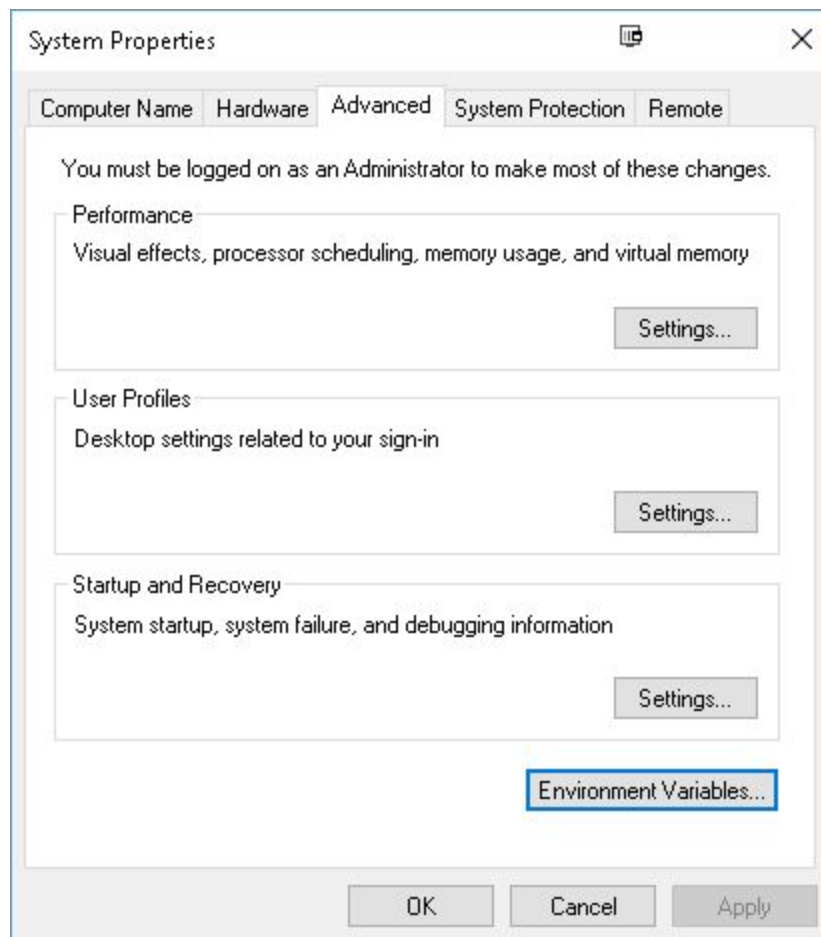
npm install grunt-cli -g

<https://gruntjs.com/getting-started>

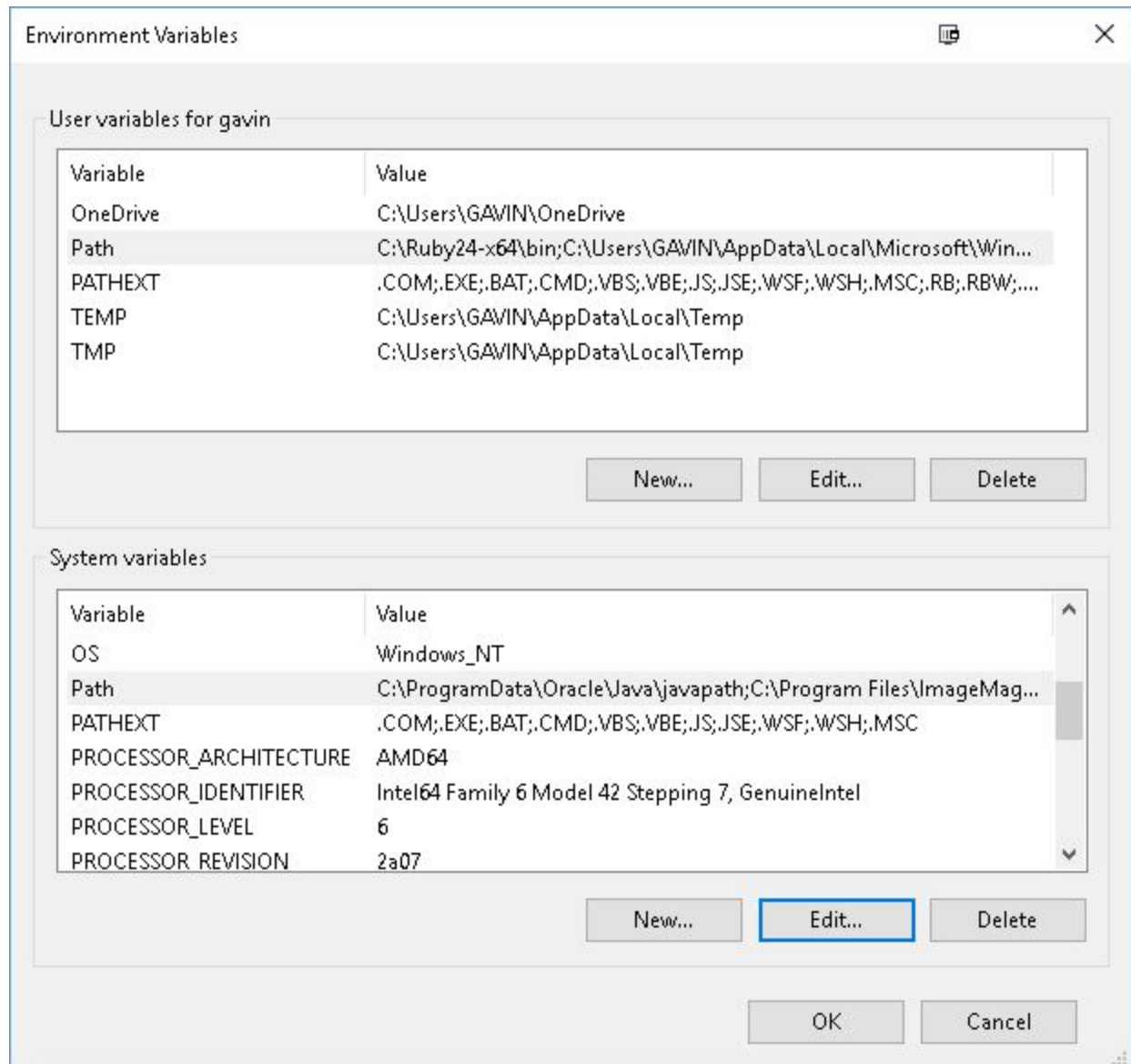
3. Troubleshoot

3a. Missing npm environment variables

3ai. Open up System Properties and click Environment Variables

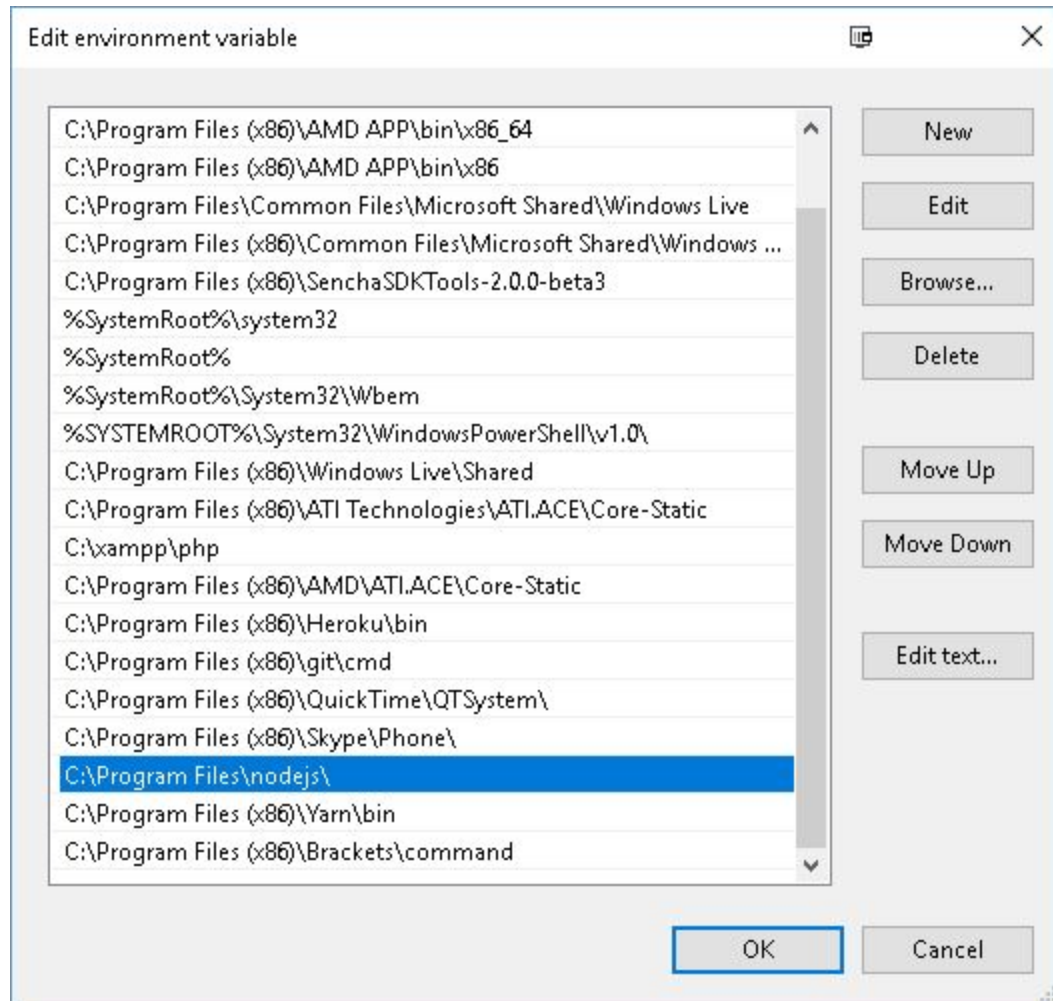


3a.iii. Under System Variables, click on Path and click Edit



3aiii. Add this if its not inside

C:\Program Files\nodejs\



<https://stackoverflow.com/questions/27864040/fixing-npm-path-in-windows-8-and-10>

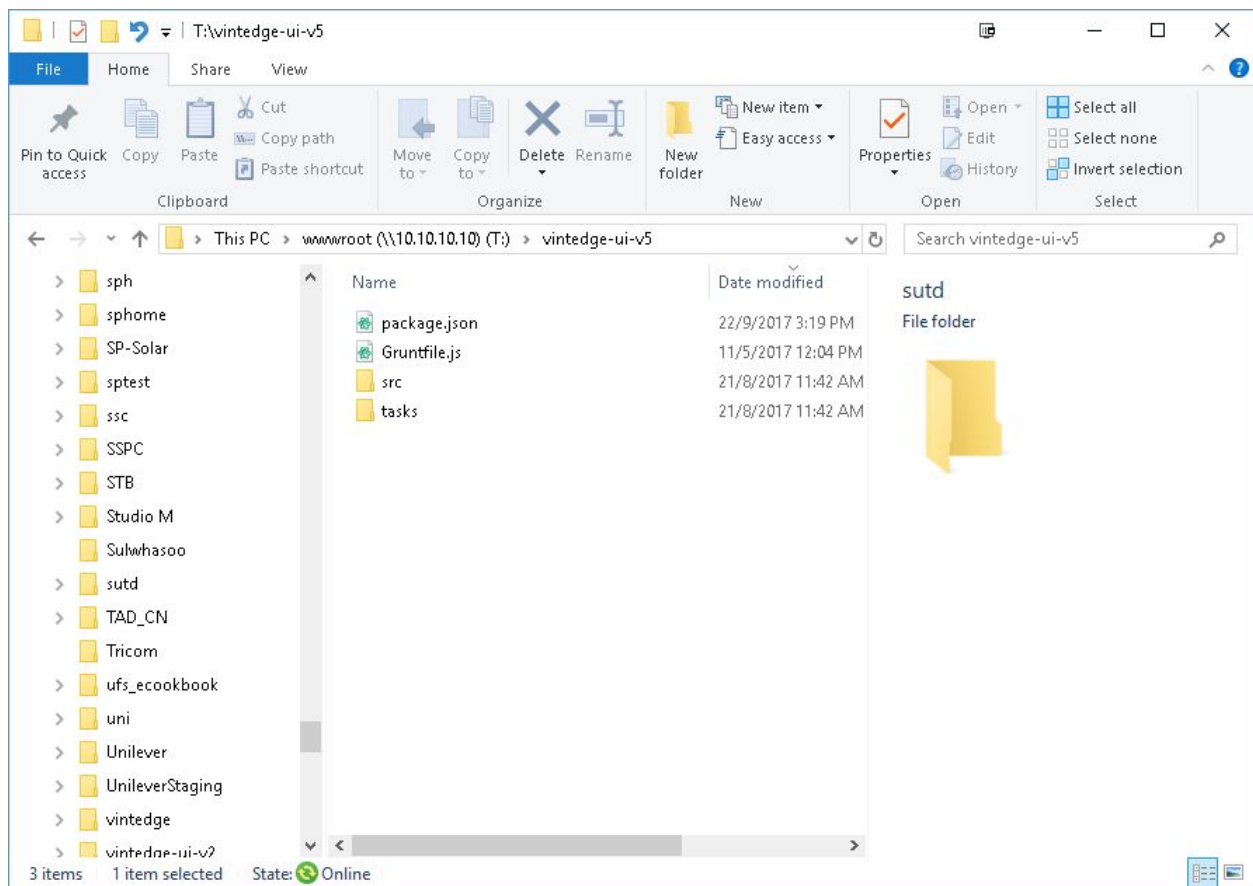
4. Get started

4a. Download the template

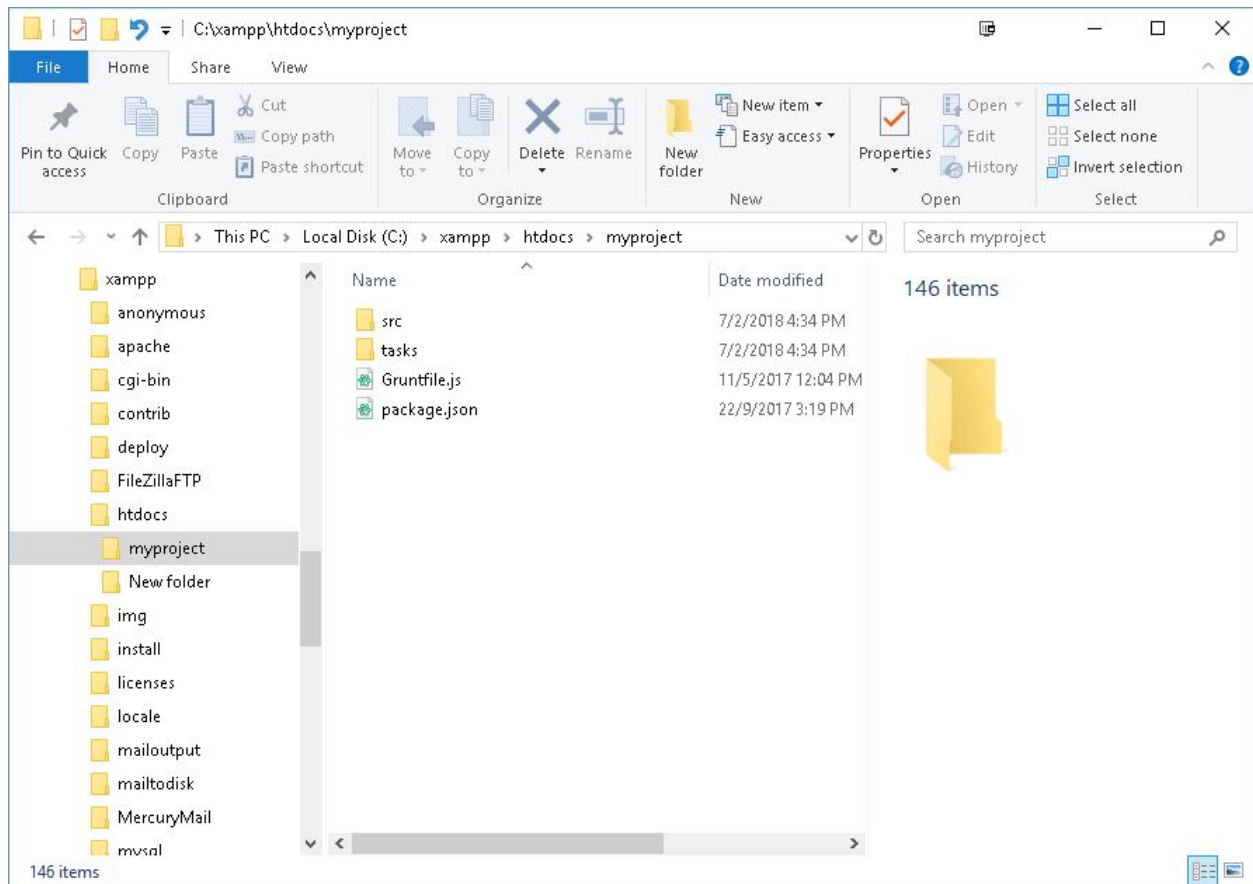
T:\vintedge-ui-v5

or

<http://dev.vintedge.com/gavin-handover/vintedge-ui-v5.zip>



4b. Copy these files to your project folder



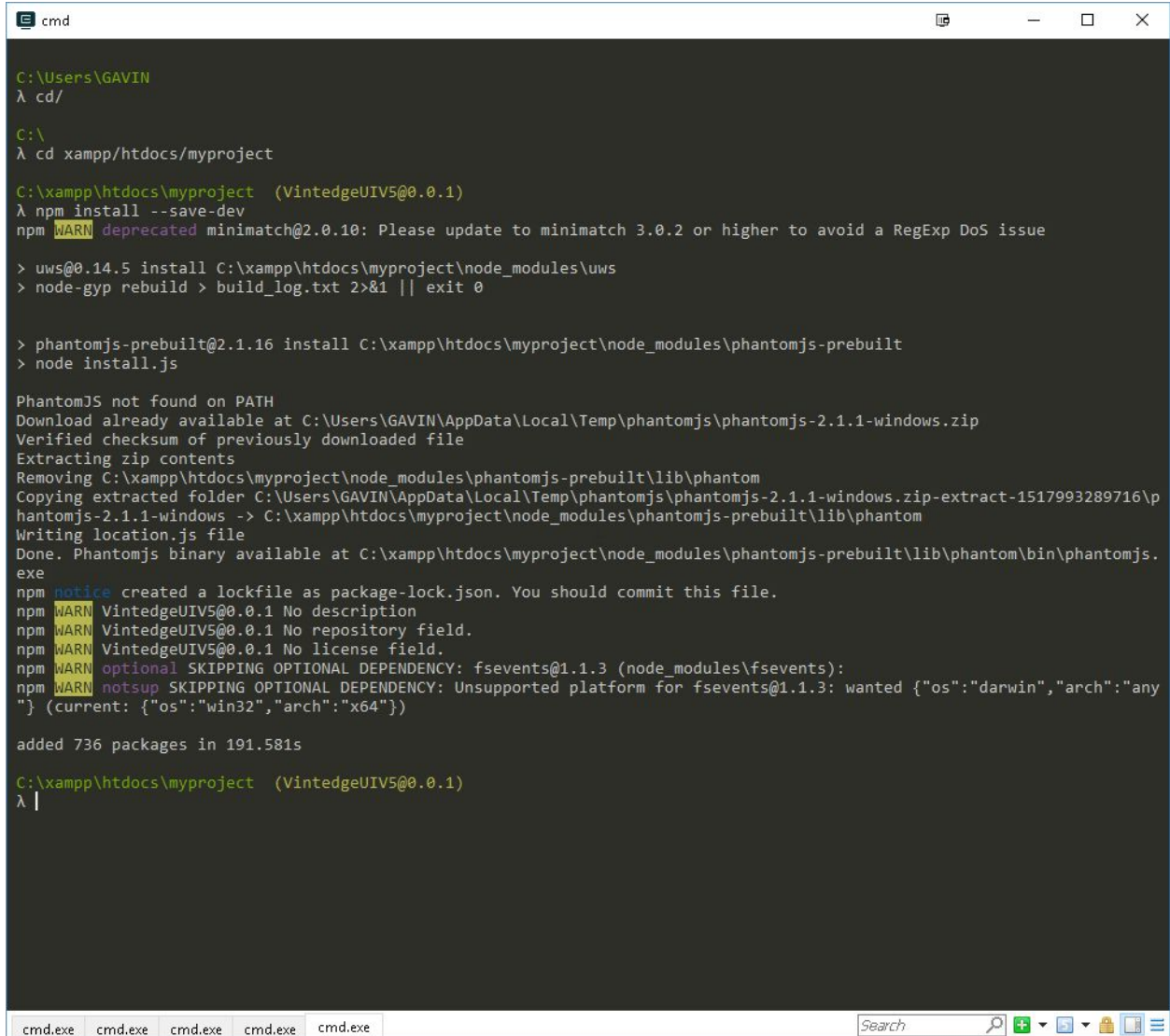
4c. Open up cmdr and navigate to the folder

cd xampp/htdocs/myproject



4d. Install the node-modules

npm install --save-dev



```
cmd
C:\Users\GAVIN
λ cd/

C:\
λ cd xampp\htdocs\myproject

C:\xampp\htdocs\myproject (VintedgeUIV5@0.0.1)
λ npm install --save-dev
npm WARN deprecated minimatch@2.0.10: Please update to minimatch 3.0.2 or higher to avoid a RegExp DoS issue

> uws@0.14.5 install C:\xampp\htdocs\myproject\node_modules\uws
> node-gyp rebuild > build_log.txt 2>&1 || exit 0

> phantomjs-prebuilt@2.1.16 install C:\xampp\htdocs\myproject\node_modules\phantomjs-prebuilt
> node install.js

PhantomJS not found on PATH
Download already available at C:\Users\GAVIN\AppData\Local\Temp\phantomjs\phantomjs-2.1.1-windows.zip
Verified checksum of previously downloaded file
Extracting zip contents
Removing C:\xampp\htdocs\myproject\node_modules\phantomjs-prebuilt\lib\phantom
Copying extracted folder C:\Users\GAVIN\AppData\Local\Temp\phantomjs\phantomjs-2.1.1-windows.zip-extract-1517993289716\phantomjs-2.1.1-windows -> C:\xampp\htdocs\myproject\node_modules\phantomjs-prebuilt\lib\phantom
Writing location.js file
Done. Phantomjs binary available at C:\xampp\htdocs\myproject\node_modules\phantomjs-prebuilt\lib\phantom\bin\phantomjs.exe
npm notice created a lockfile as package-lock.json. You should commit this file.
npm WARN VintedgeUIV5@0.0.1 No description
npm WARN VintedgeUIV5@0.0.1 No repository field.
npm WARN VintedgeUIV5@0.0.1 No license field.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.1.3 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.1.3: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

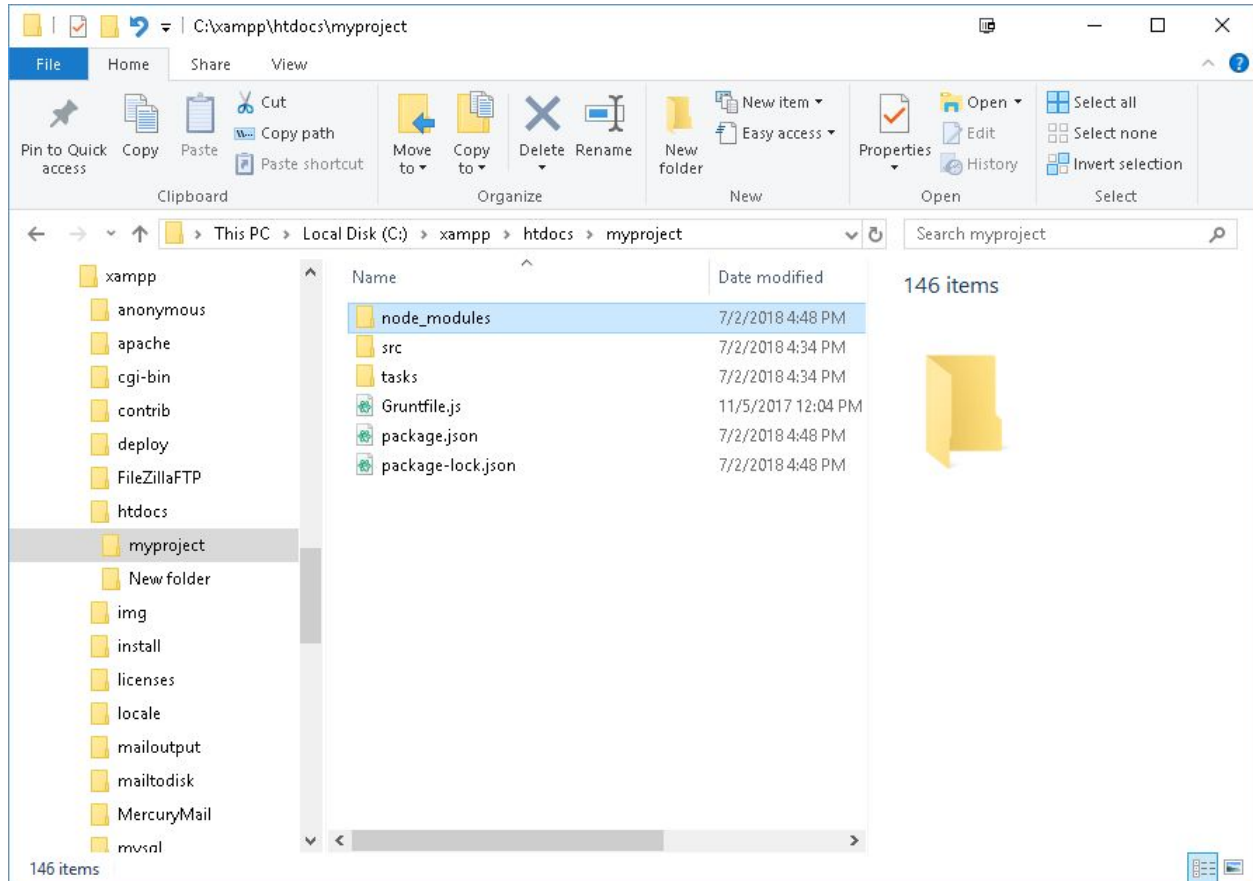
added 736 packages in 191.581s

C:\xampp\htdocs\myproject (VintedgeUIV5@0.0.1)
λ |
```

4e. Check node-modules are installed

Please note that you do not need to manually install these

Its done via: `npm install --save-dev`



4f. Running Grunt task

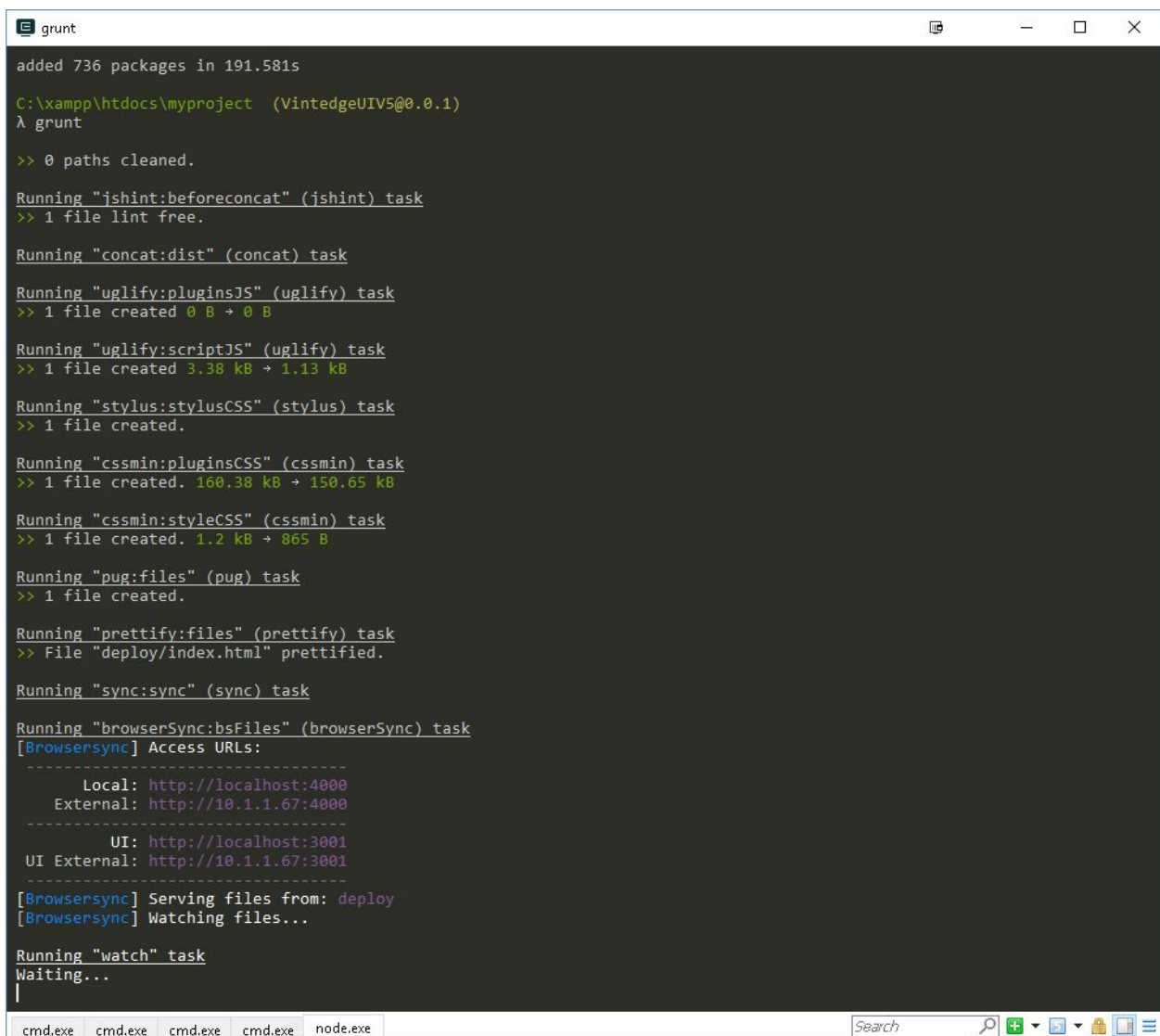
grunt

To terminate any task: Ctrl + c

To clear console: clear

To close console: exit

You can also run specific task: Eg, grunt clean



```
grunt
added 736 packages in 191.581s

C:\xampp\htdocs\myproject (VintedgeUIV5@0.0.1)
λ grunt

>> 0 paths cleaned.

Running "jshint:beforeconcat" (jshint) task
>> 1 file lint free.

Running "concat:dist" (concat) task

Running "uglify:pluginsJS" (uglify) task
>> 1 file created 0 B → 0 B

Running "uglify:scriptJS" (uglify) task
>> 1 file created 3.38 kB → 1.13 kB

Running "stylus:stylusCSS" (stylus) task
>> 1 file created.

Running "cssmin:pluginsCSS" (cssmin) task
>> 1 file created. 160.38 kB → 150.65 kB

Running "cssmin:styleCSS" (cssmin) task
>> 1 file created. 1.2 kB → 865 B

Running "pug:files" (pug) task
>> 1 file created.

Running "prettify:files" (prettify) task
>> File "deploy/index.html" prettified.

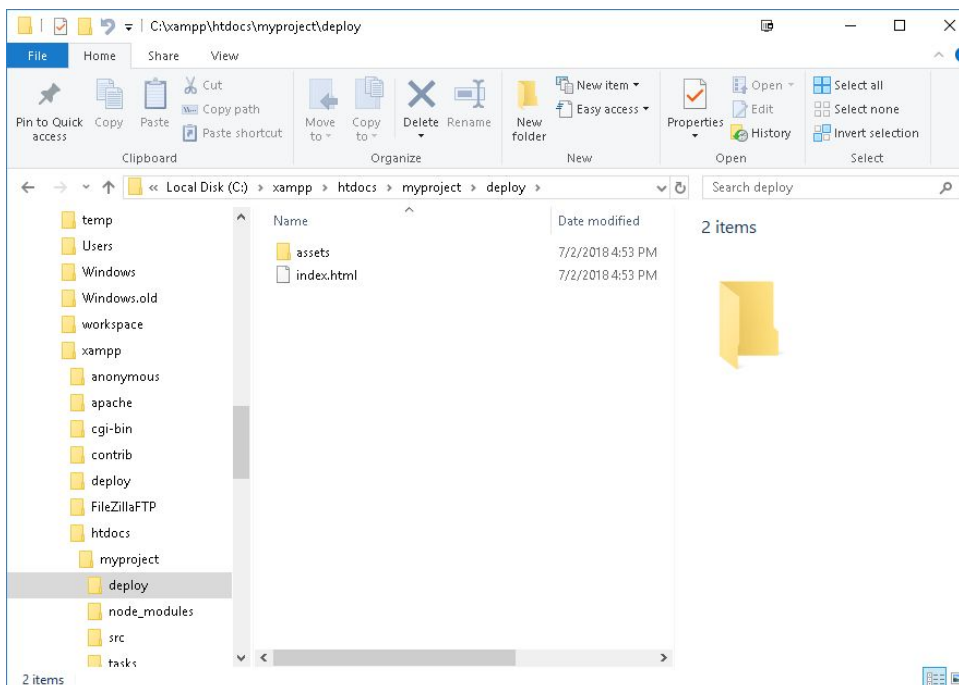
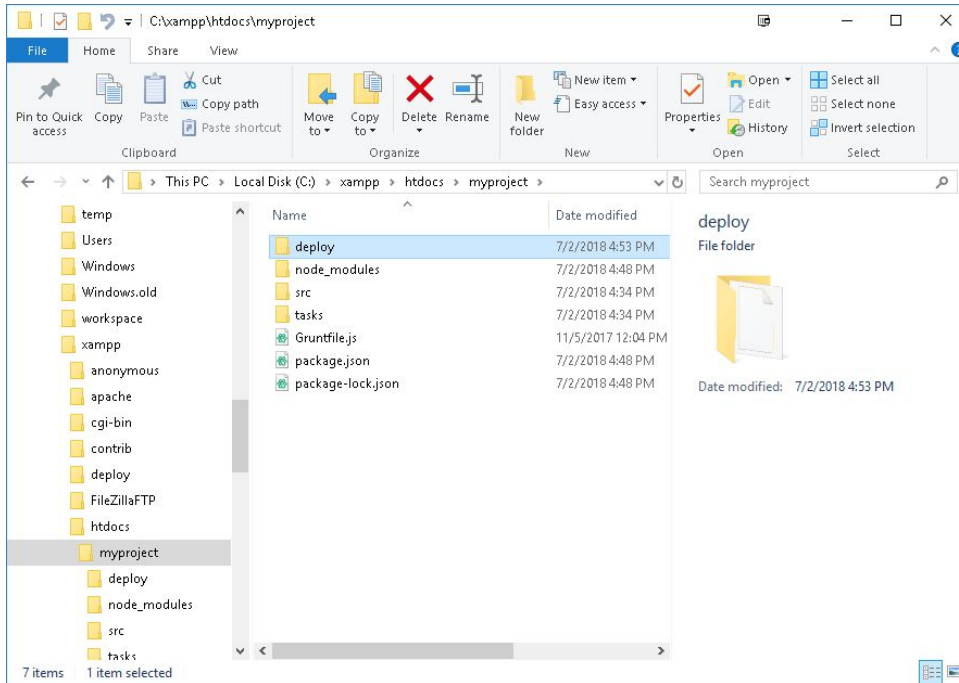
Running "sync:sync" (sync) task

Running "browserSync:bsFiles" (browserSync) task
[Browsersync] Access URLs:
  -----
    Local: http://localhost:4000
    External: http://10.1.1.67:4000
  -----
    UI: http://localhost:3001
    UI External: http://10.1.1.67:3001
  -----
[Browsersync] Serving files from: deploy
[Browsersync] Watching files...

Running "watch" task
Waiting...
|
```

4g. Deploy folder created automatically

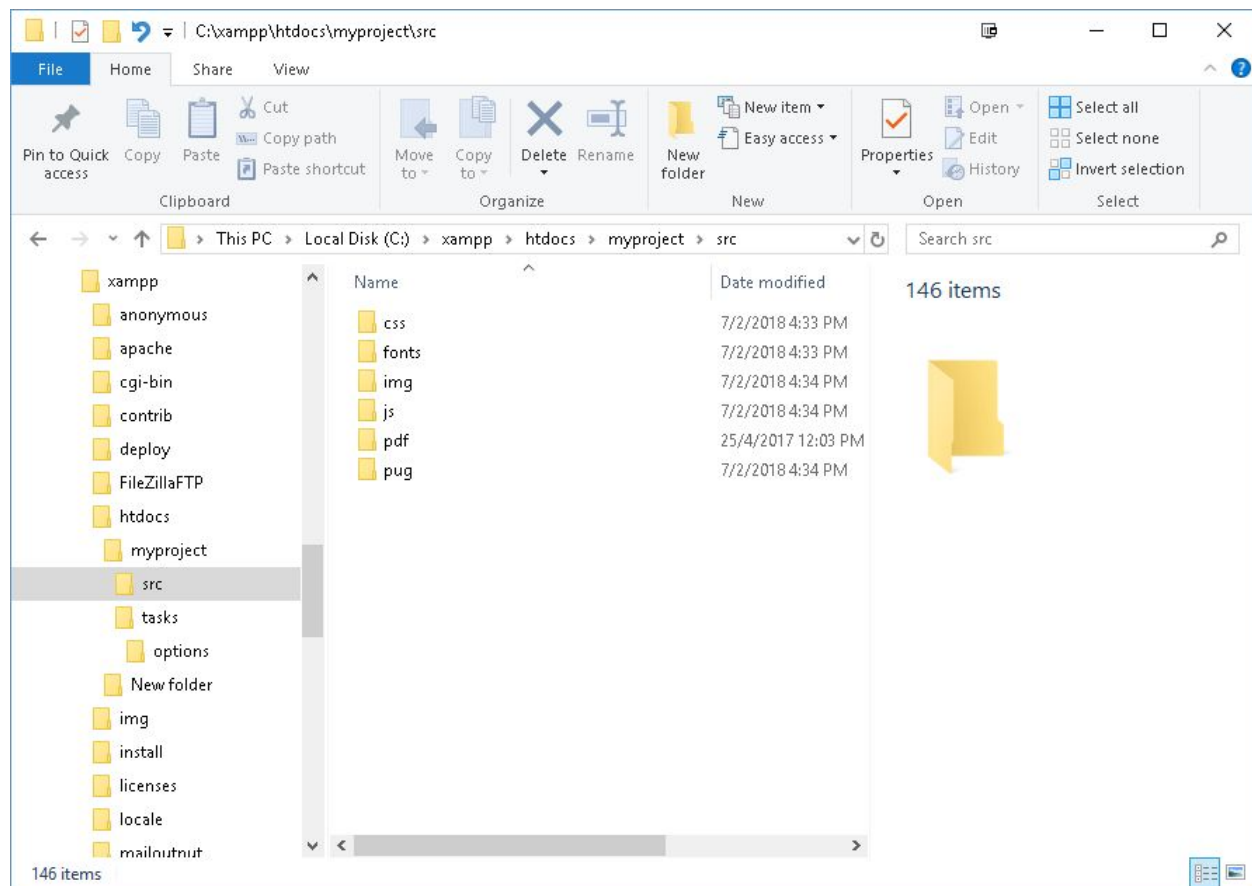
These will be the files for deployment



5. How it works

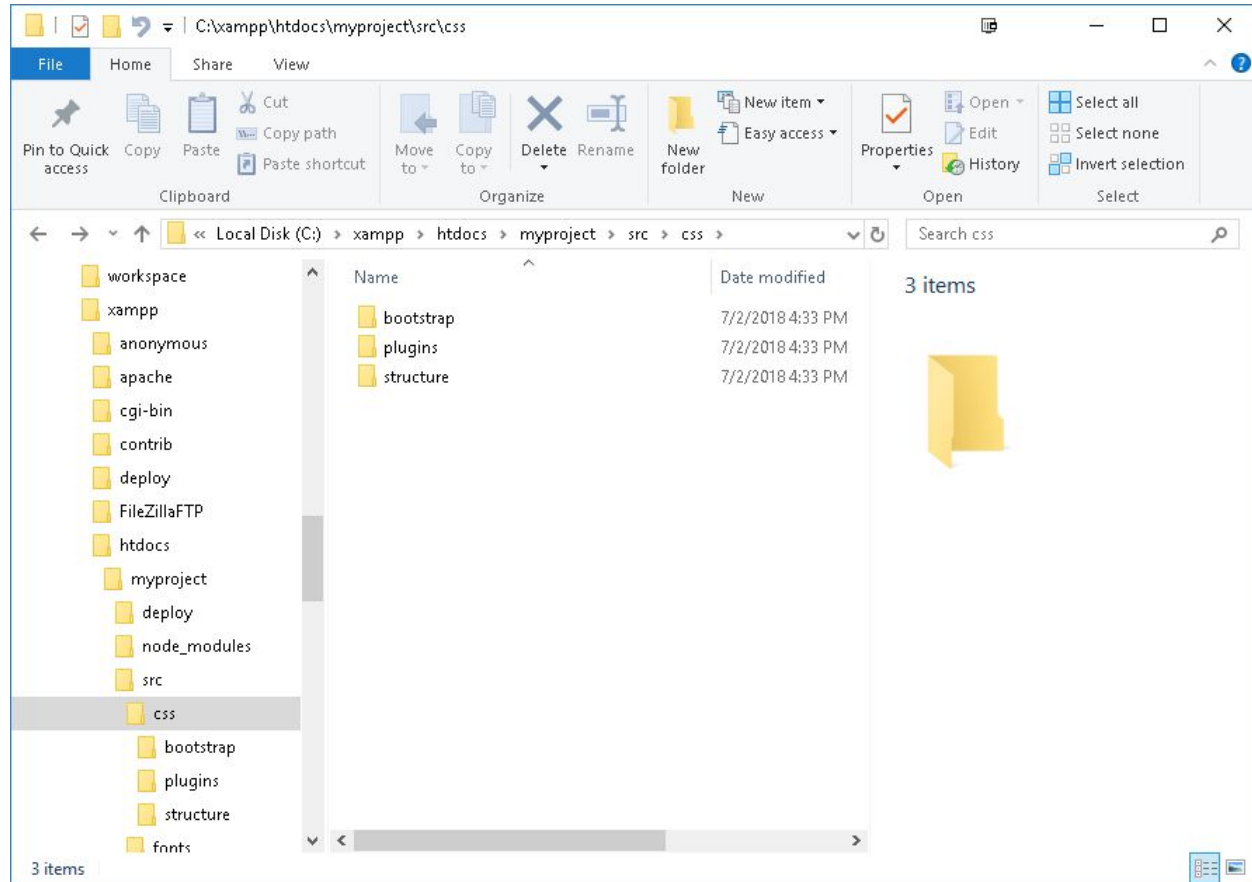
5a. Source files folder structure

Contains css, fonts, img, js, pdf and pug



5b. CSS folder structure

Contains bootstrap, plugins and structure



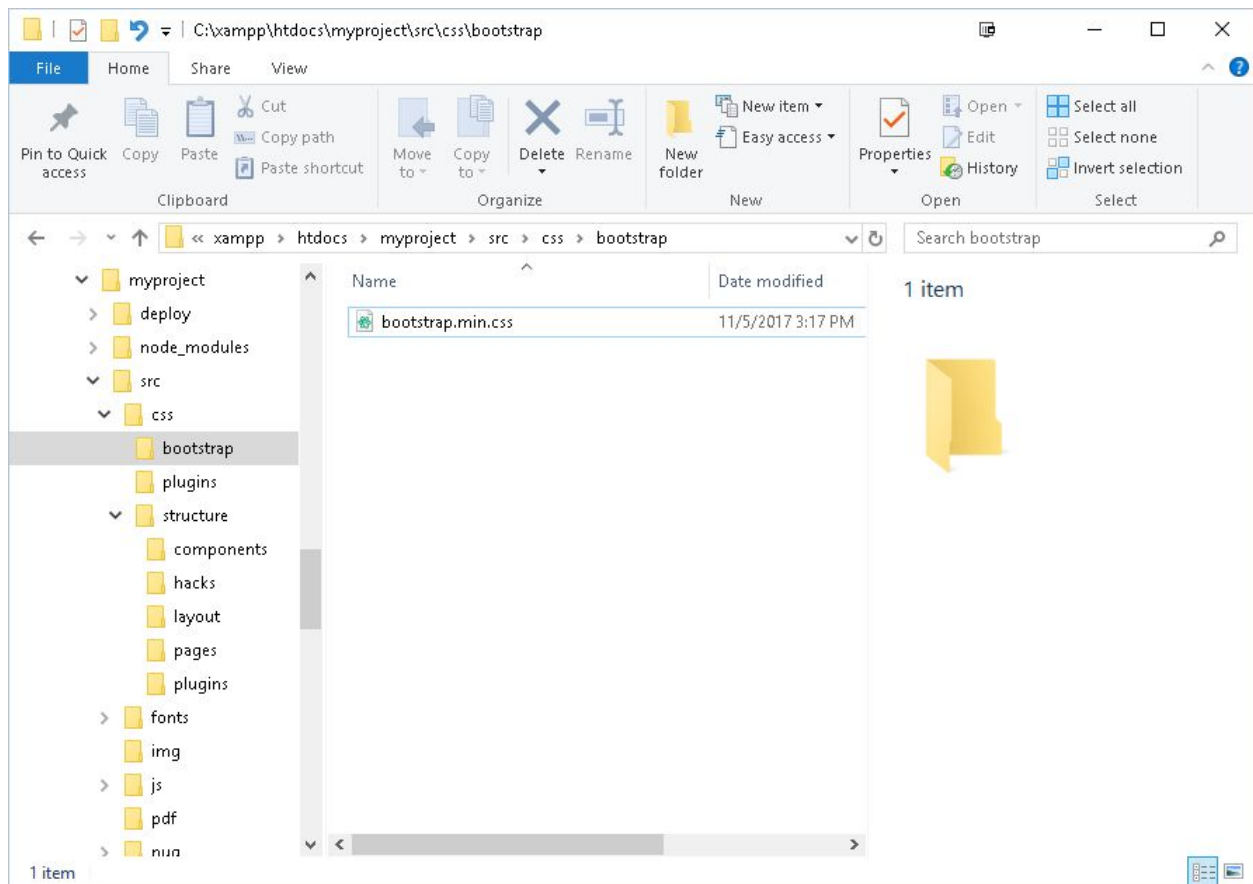
5bi. css/bootstrap Folder

Contains bootstrap.min.css

Bootstrap v3.3.7

Just replace this file if there is an update

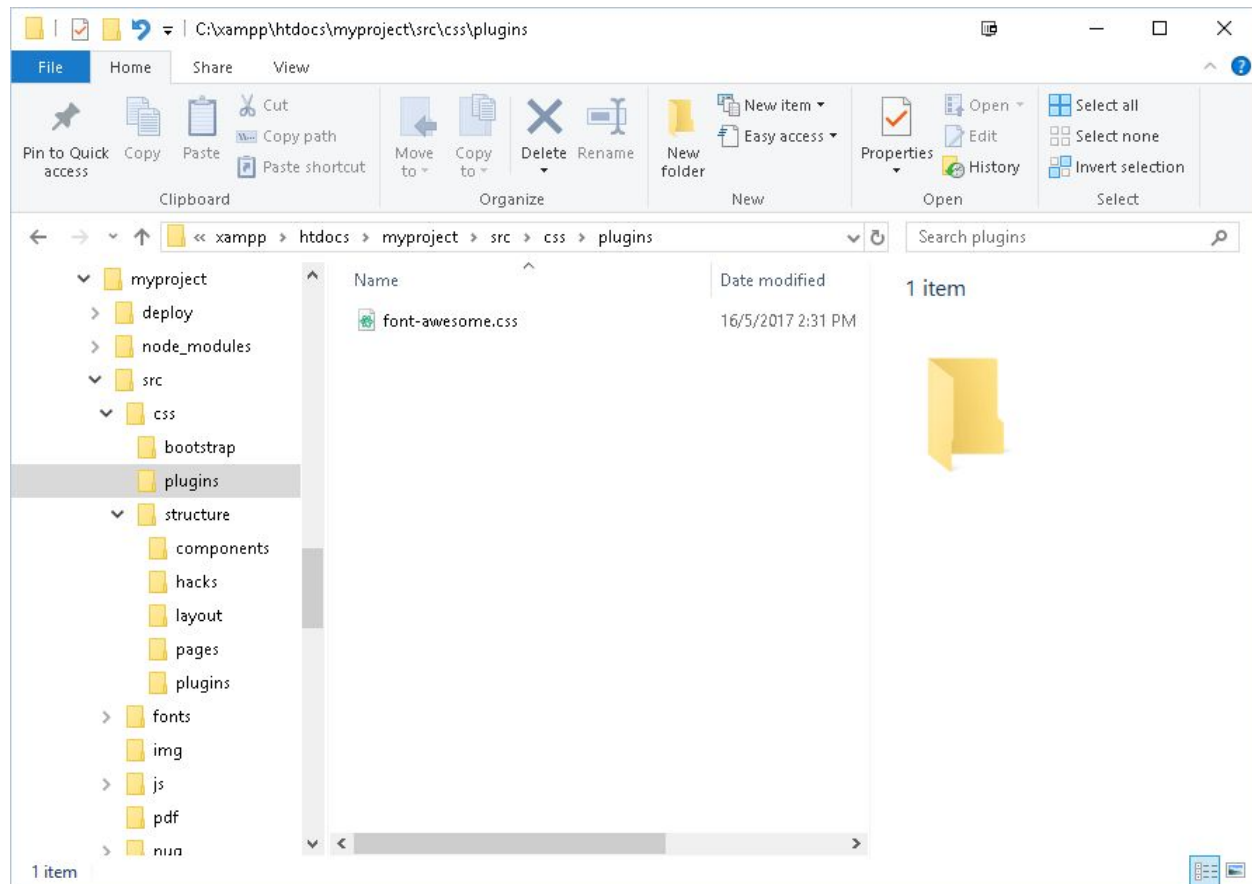
Will be auto compiled with Grunt



5bii. css/plugins folder

This is where I put all the plugins css

Will be auto compiled with Grunt



5biii. css/structure Folder

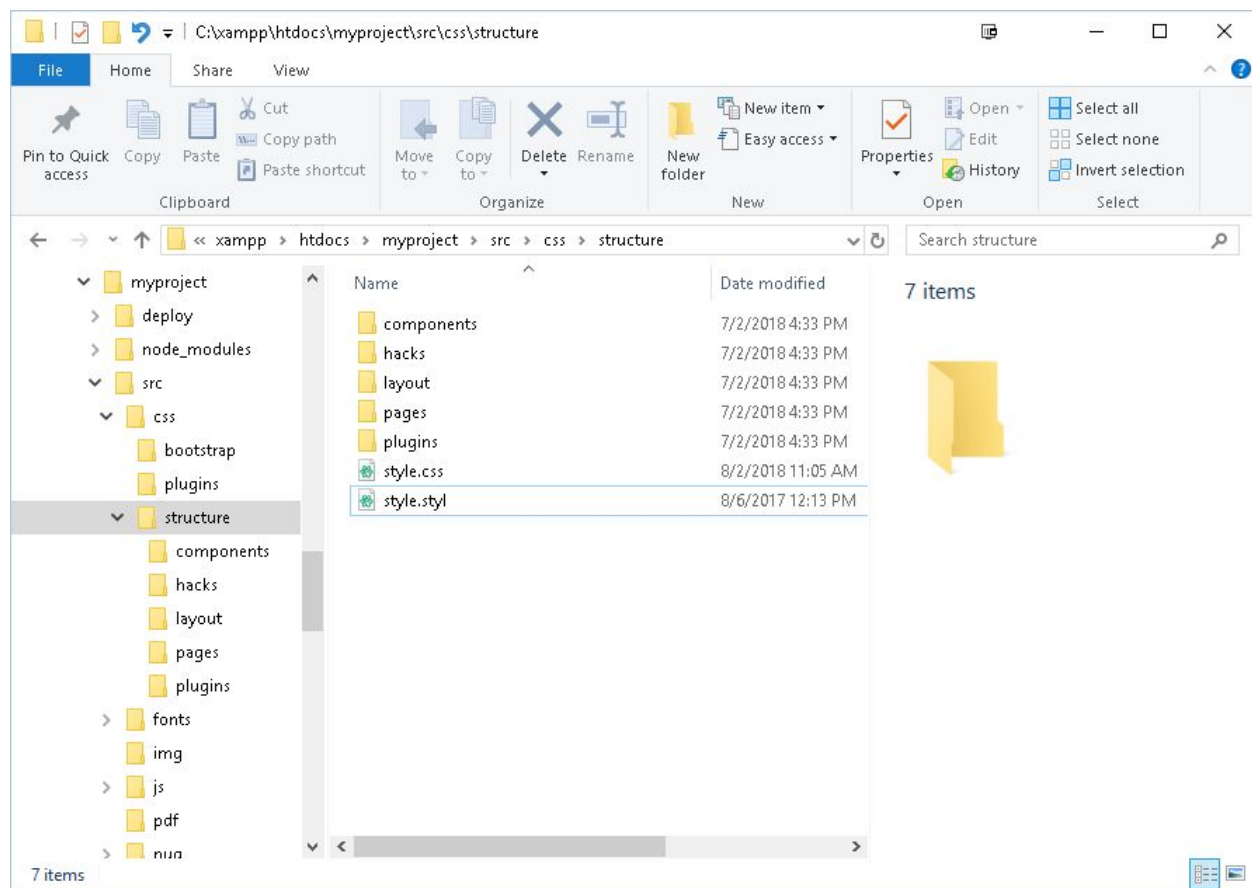
Contains components, hacks, layout, pages and plugins

This is where I put all the custom css

style.styl contains global vars and styles

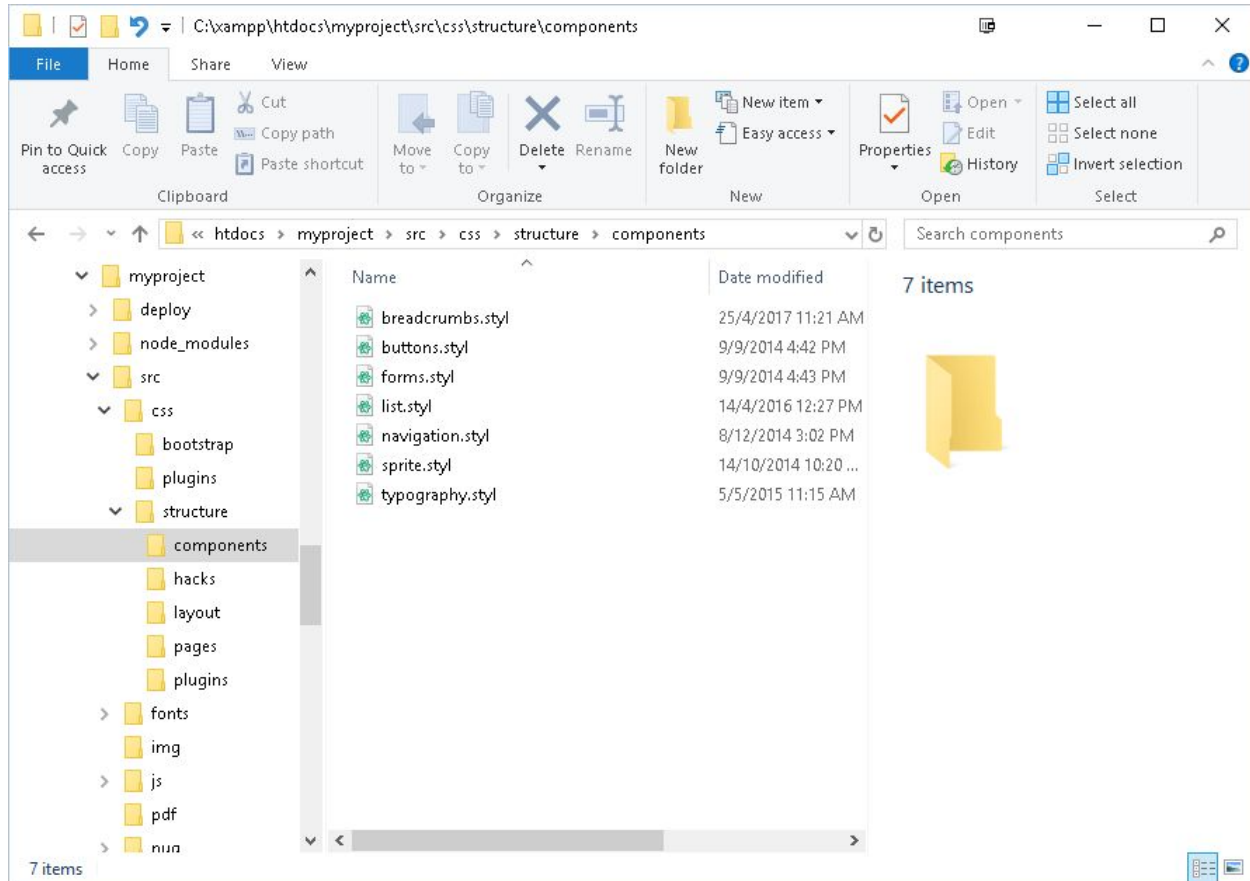
Please do not delete or add style in **style.css**

Will be auto compiled with Grunt



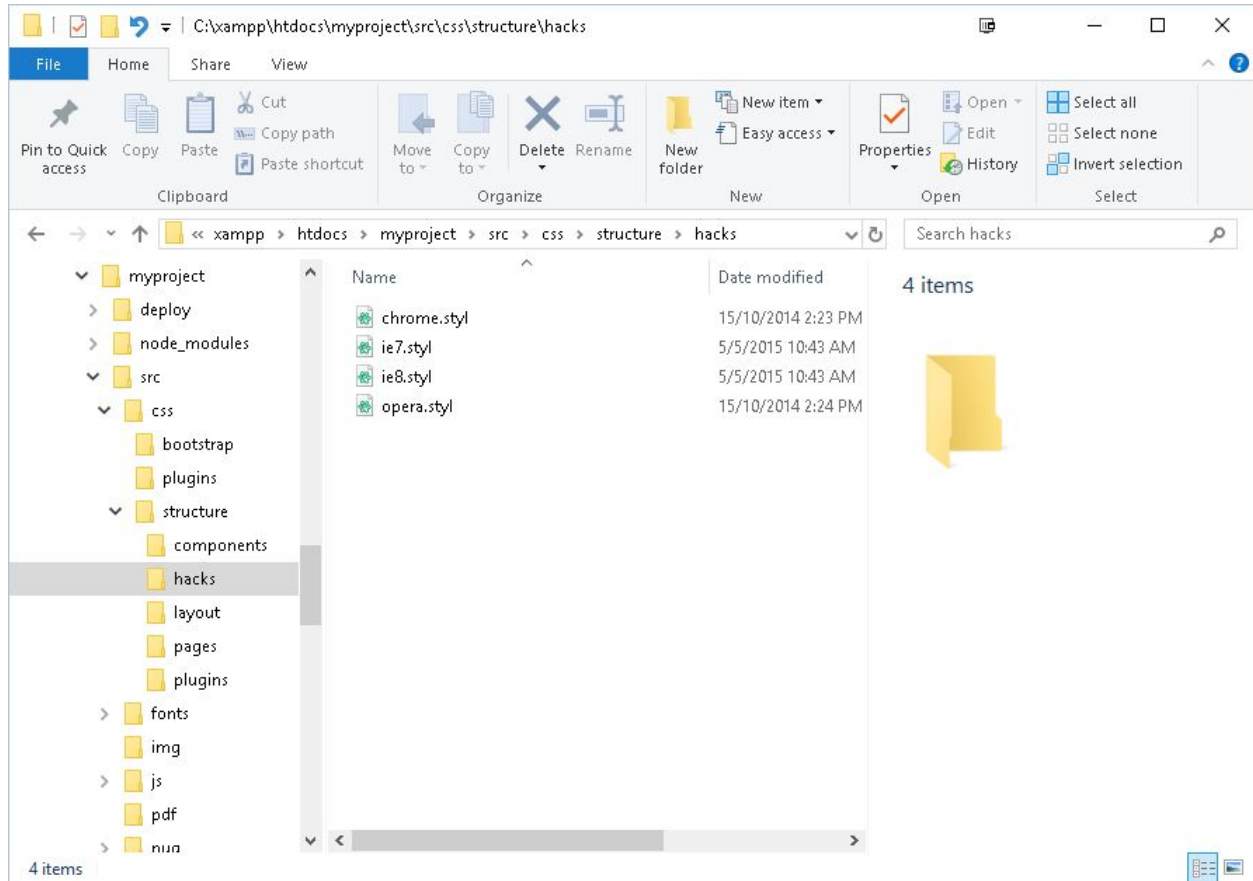
5biiia. css/structure/components Folder

Contains components related styl



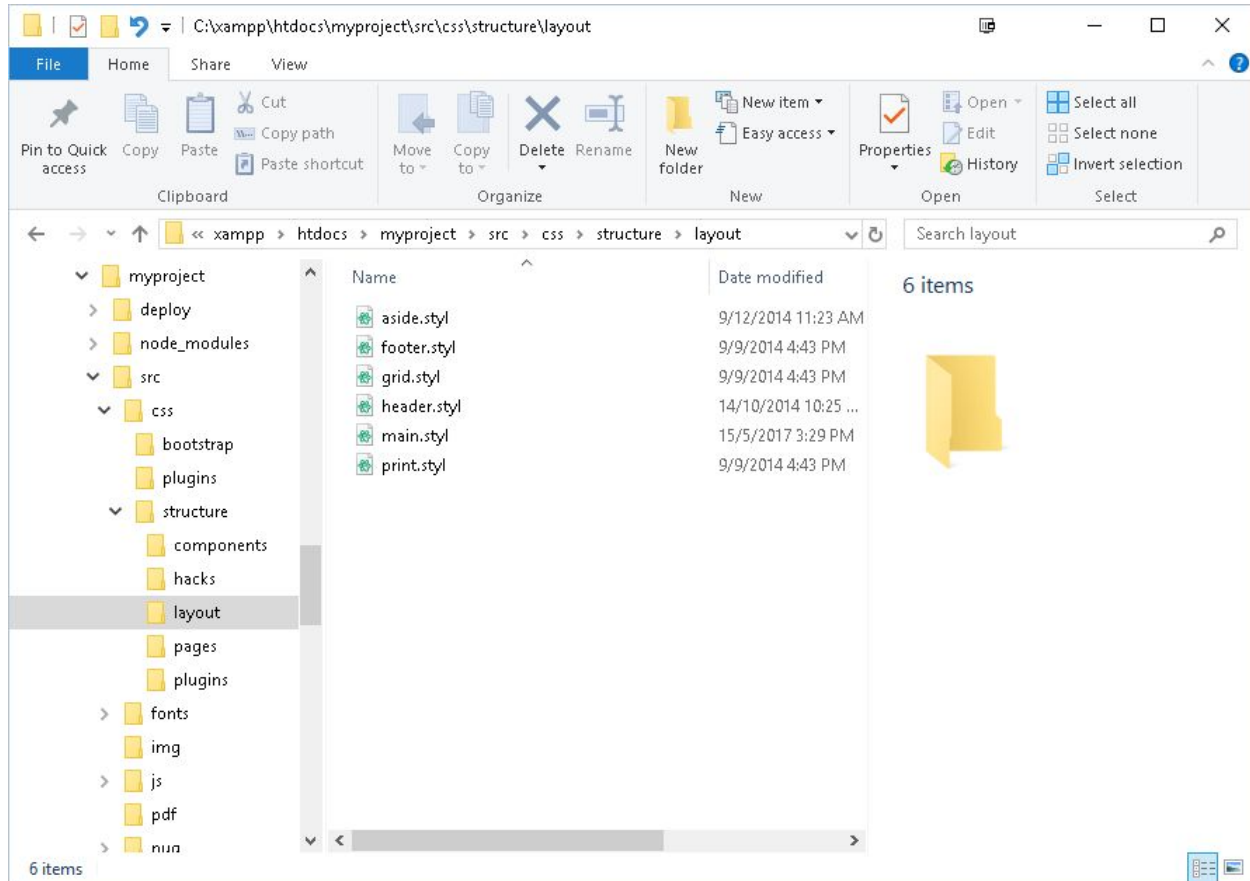
5biiib. css/structure/hacks Folder

Contains specific browser hacks



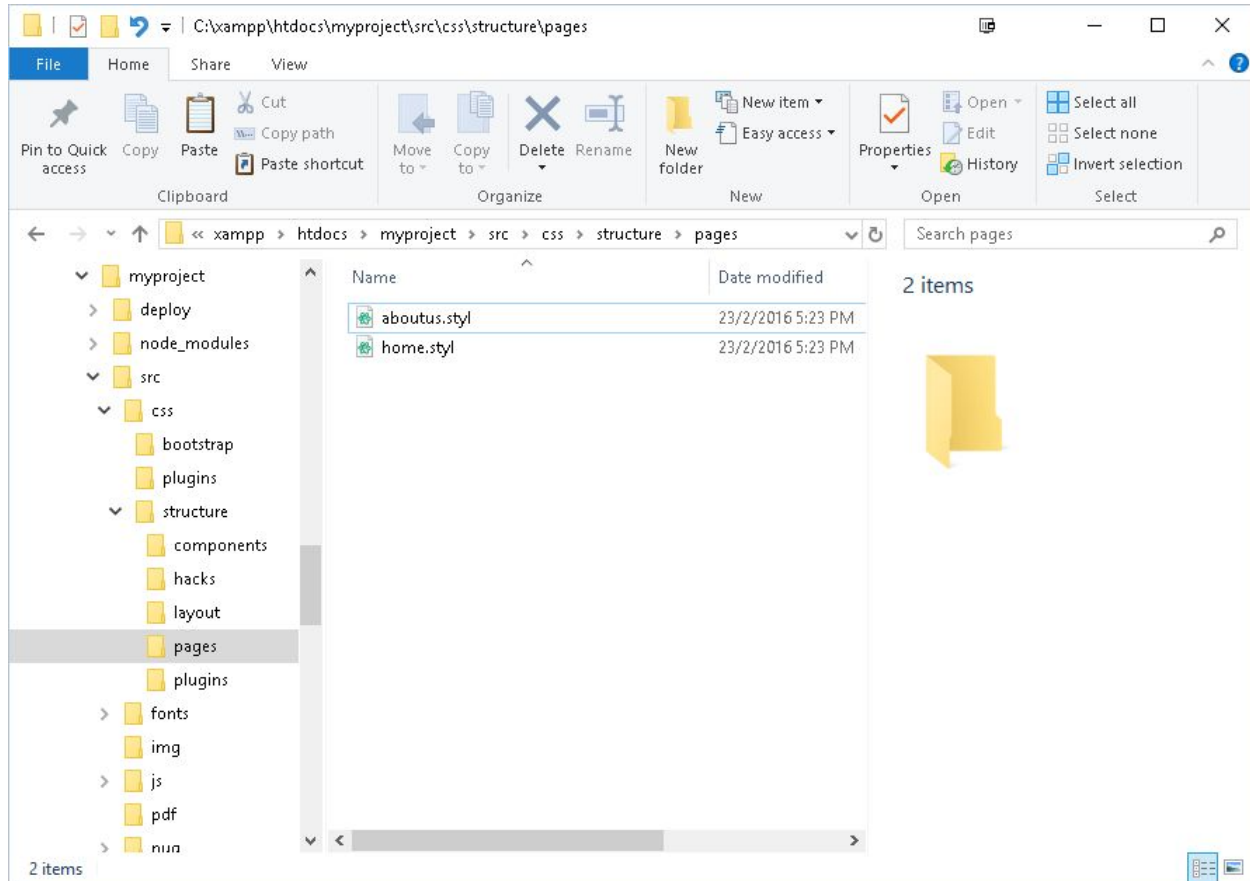
5biiic. css/structure/layout Folder

Contains layout related styl



5biid. css/structure/pages Folder

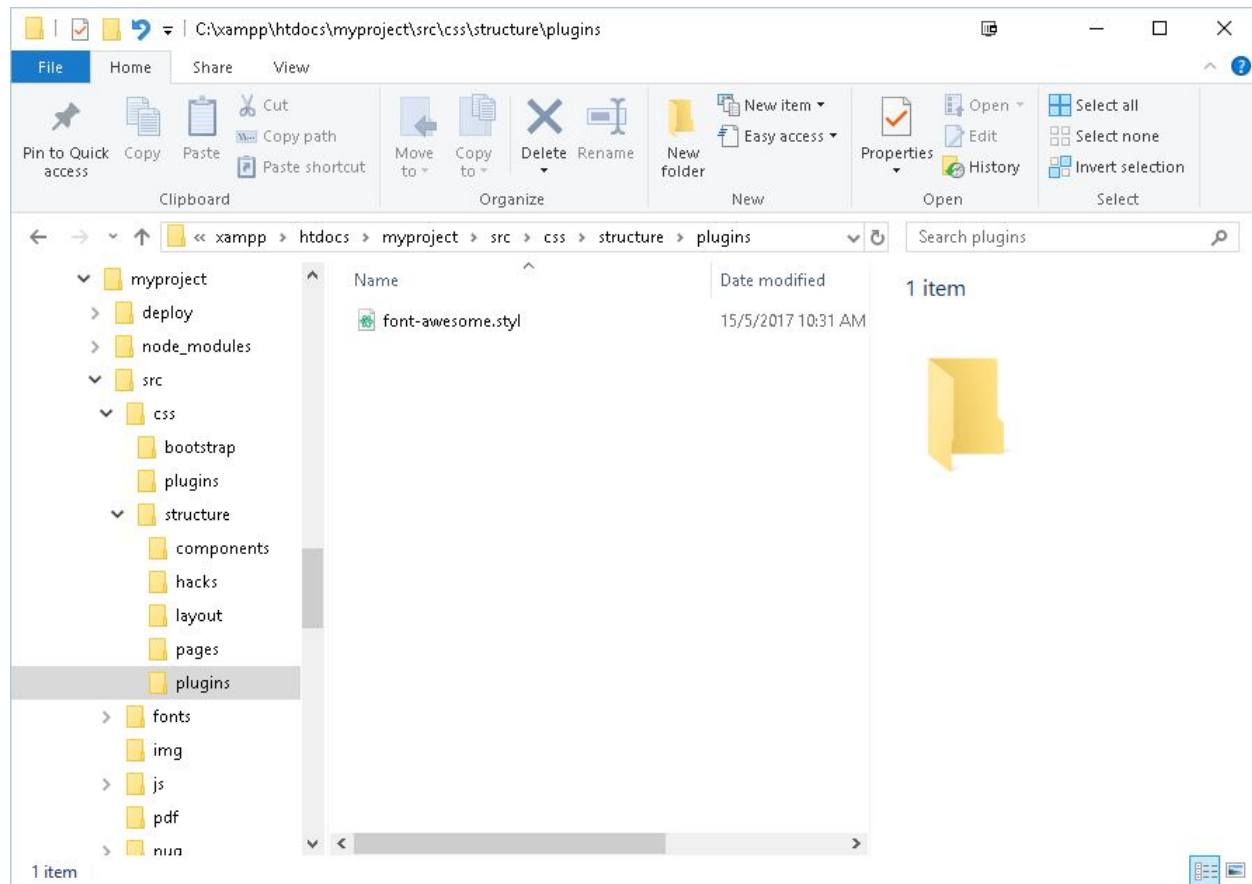
Contains page related styl



5biii. css/structure/pages Folder

Contains plugins related styl

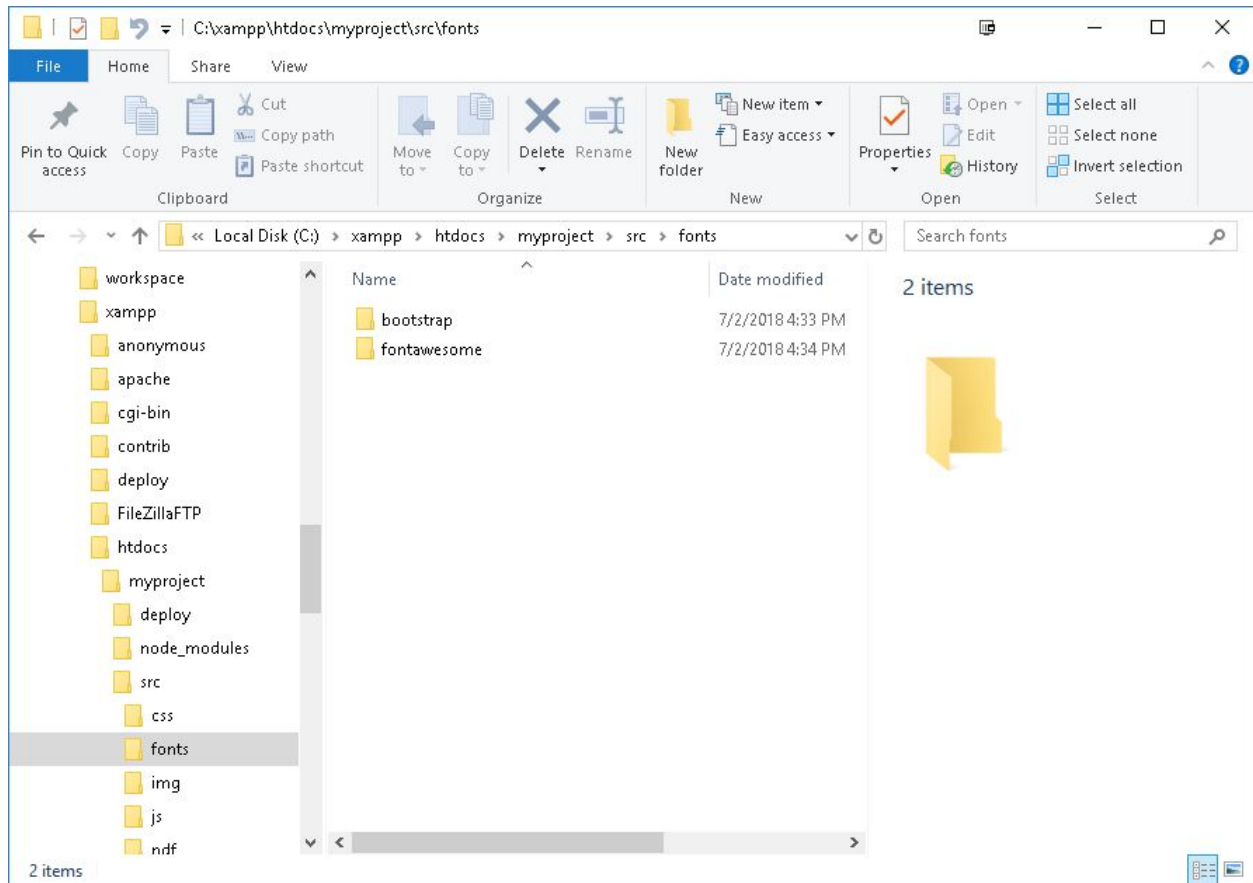
This is used to addon or overwrite css/plugins style



5c. Fonts folder structure

Contains all fonts used

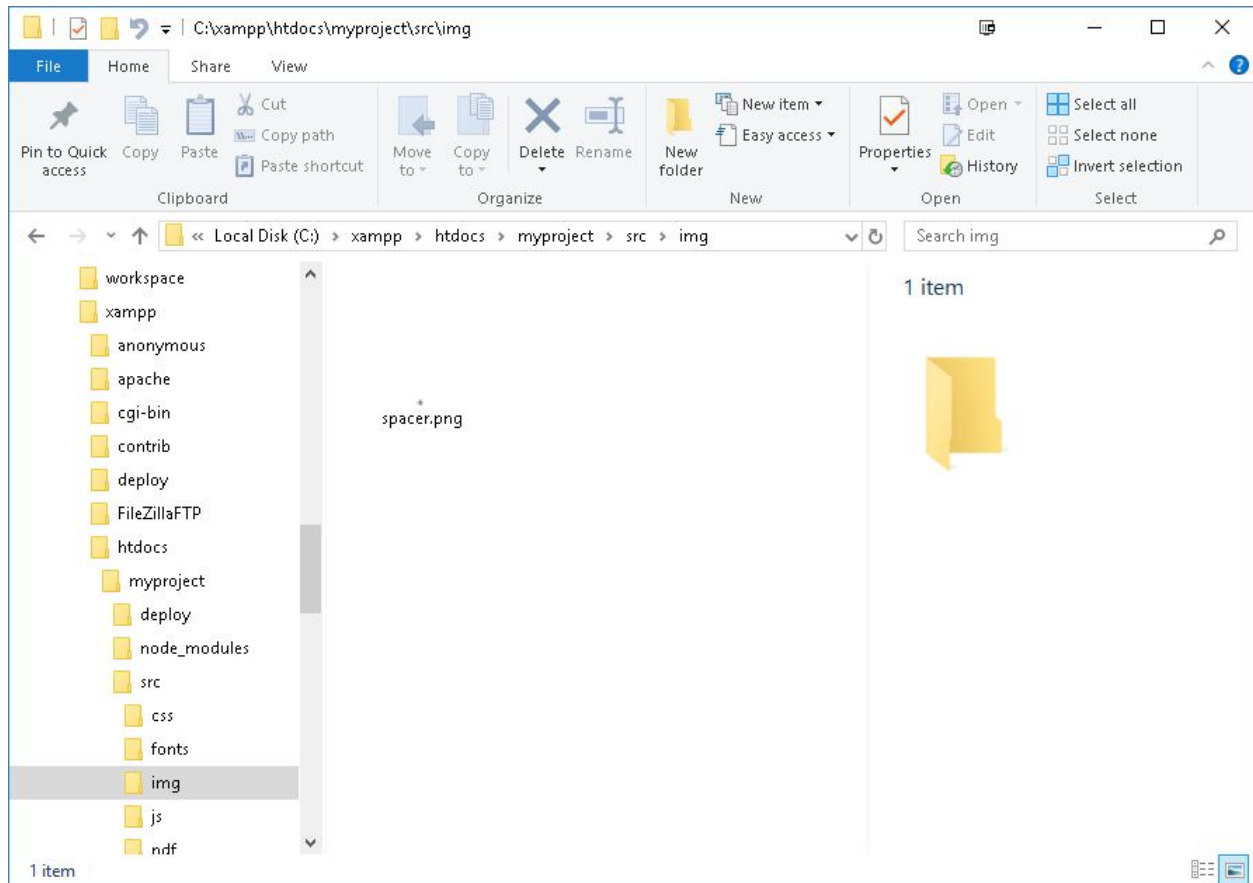
Please feel free to use folders to organise your fonts



5d. Img folder structure

Contains all images

Please feel free to use folders to organise your images



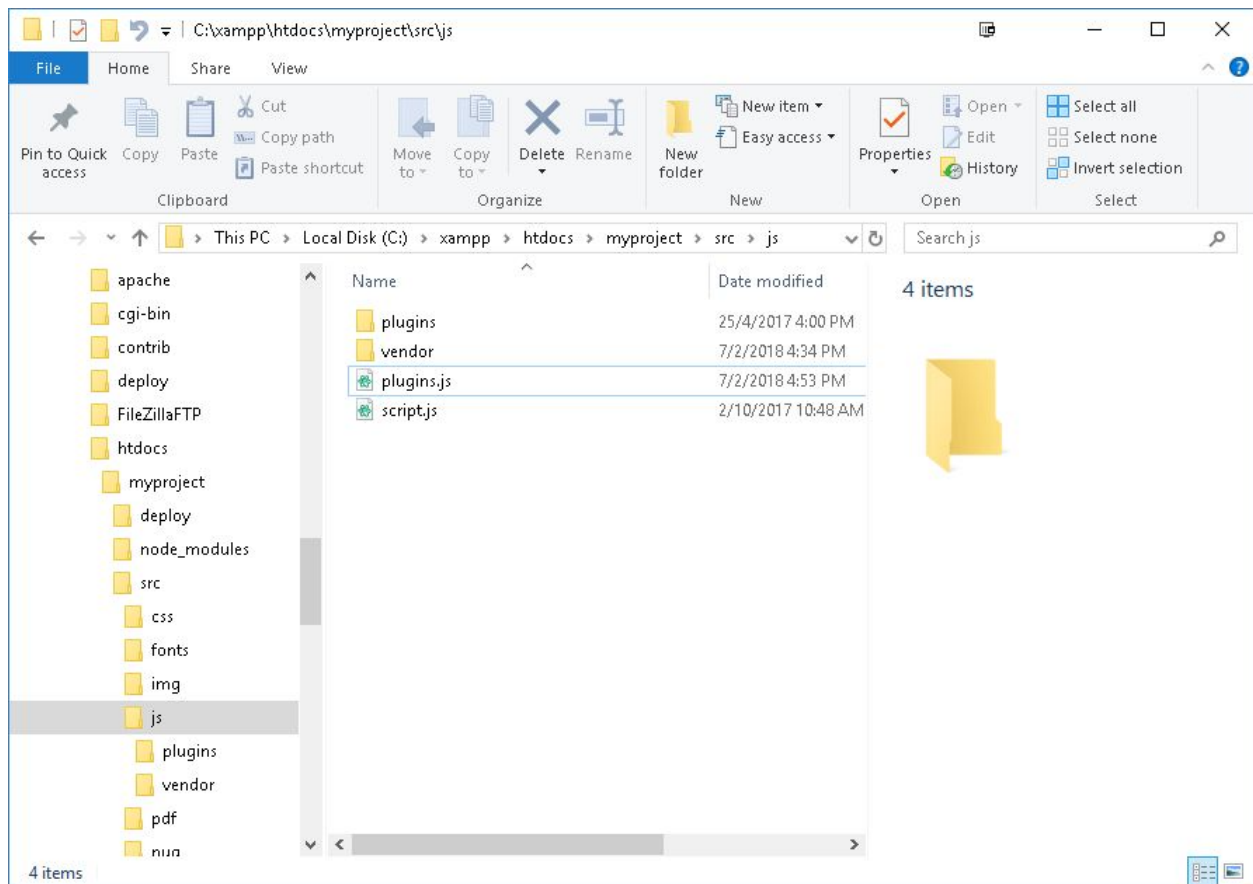
5e. JS folder structure

Contains plugins folder, vendor folder, plugins.js and script.js

Please do not delete or add js in **plugins.js**

Add custom JS into script.js

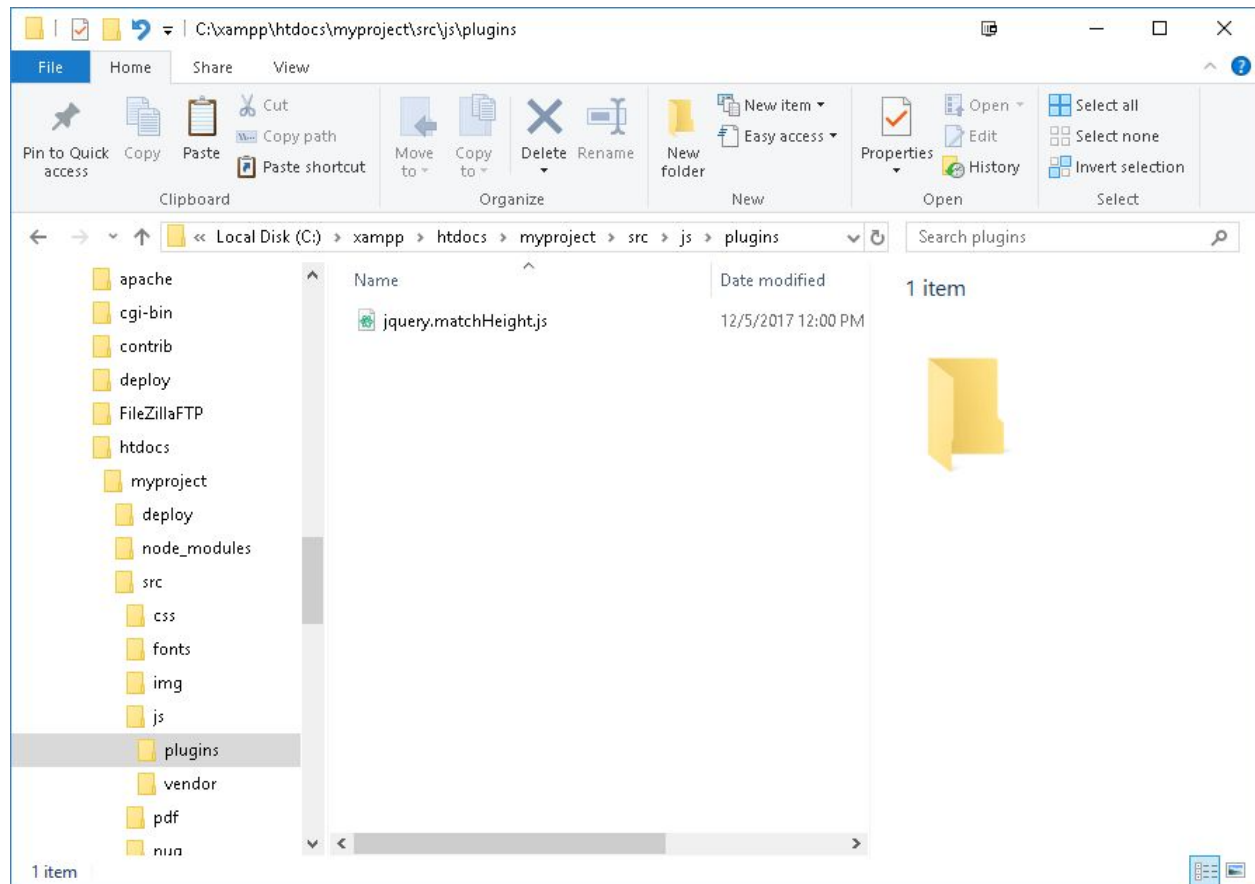
Will be auto compiled with Grunt



5ei. js/plugins folder

This is where I put all the plugins js

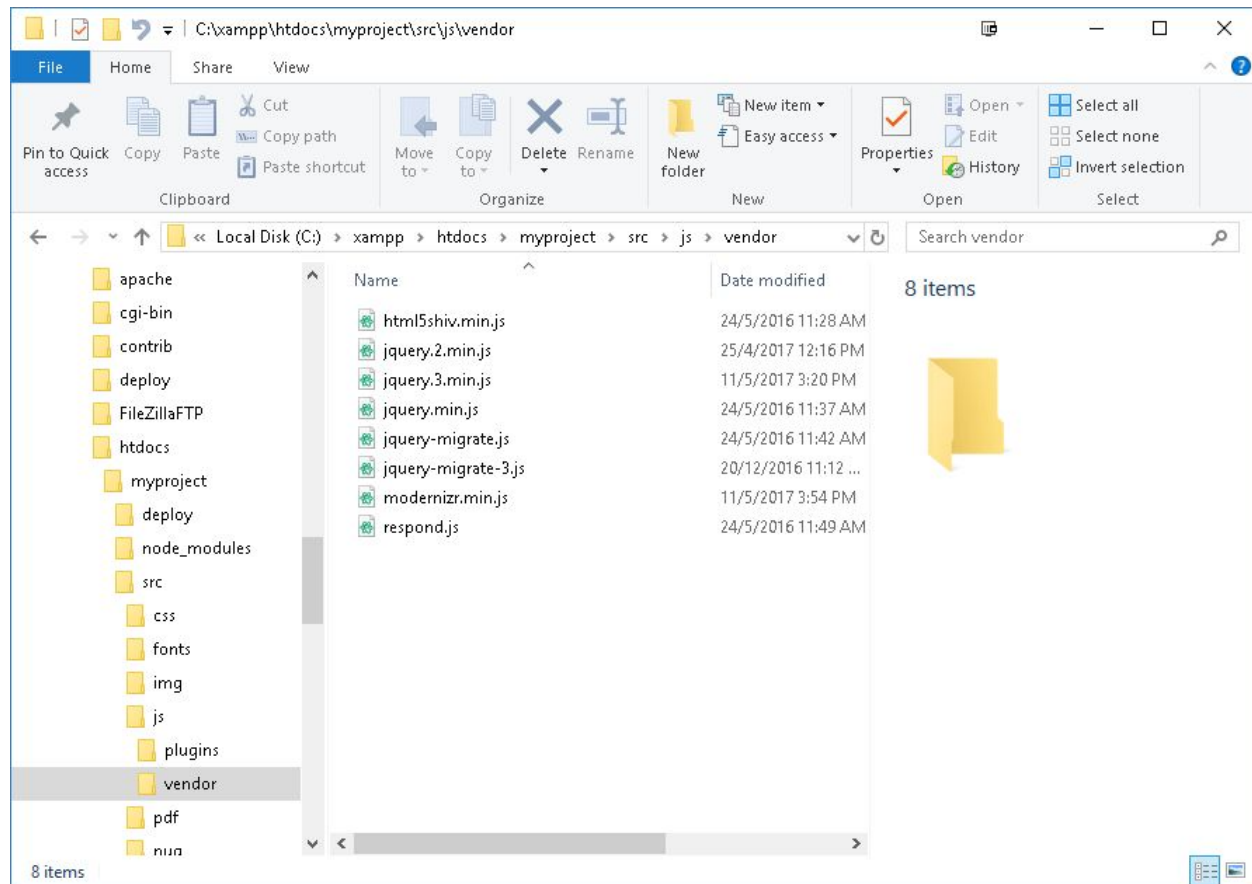
Will be auto compiled with Grunt



5eii. js/vendor folder

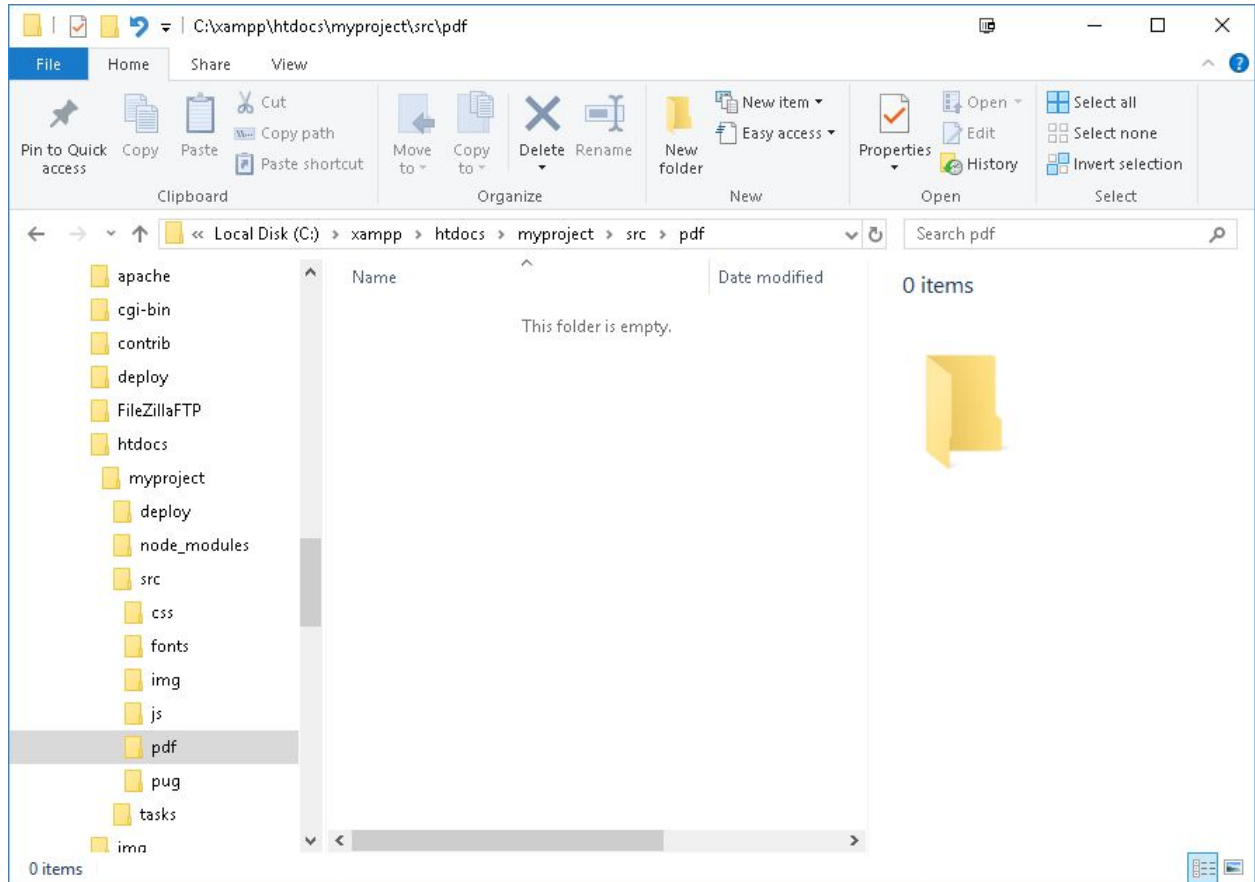
This is where I put all the vendor js

Will **NOT** be auto compiled with Grunt



5f. PDF folder structure

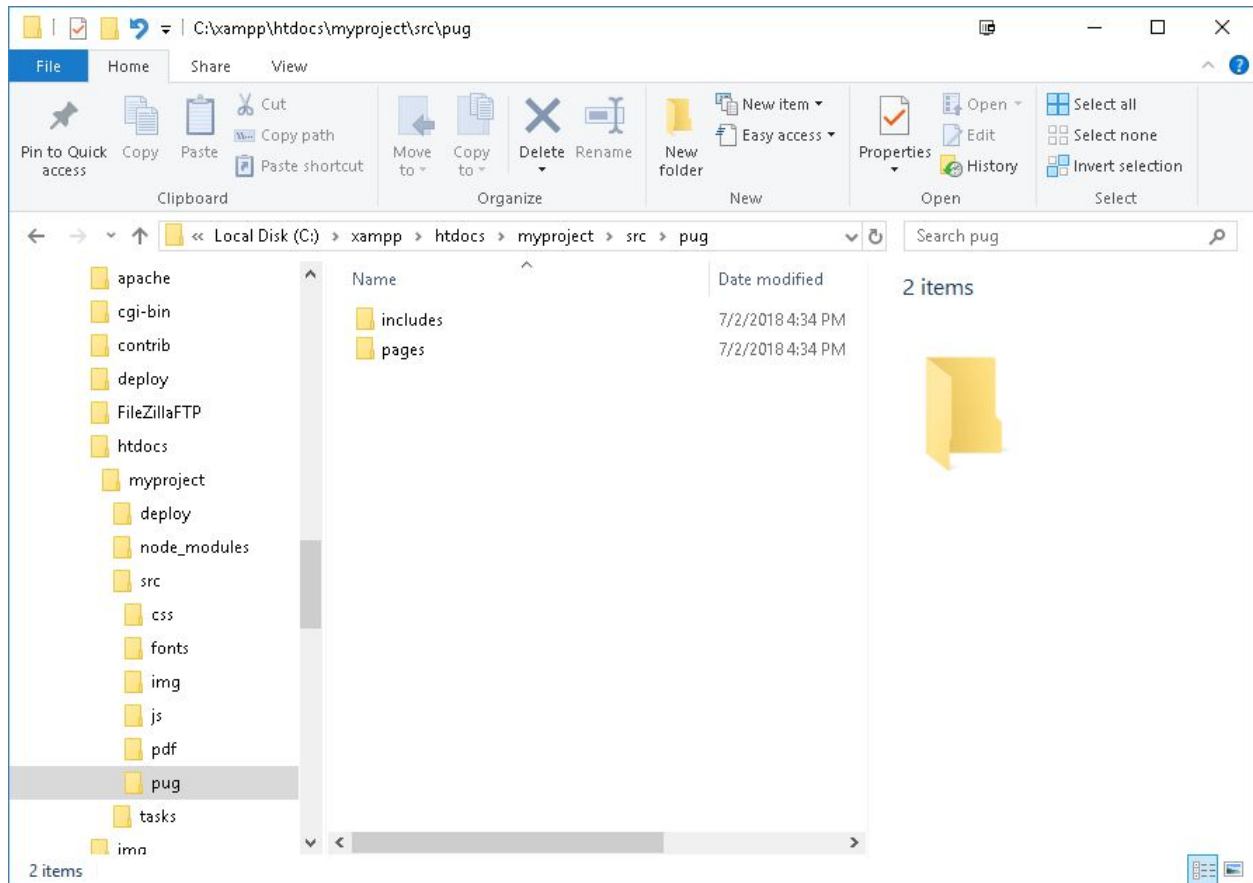
Contains all pdf or media



5g. Pug folder structure

Contains includes and pages folder

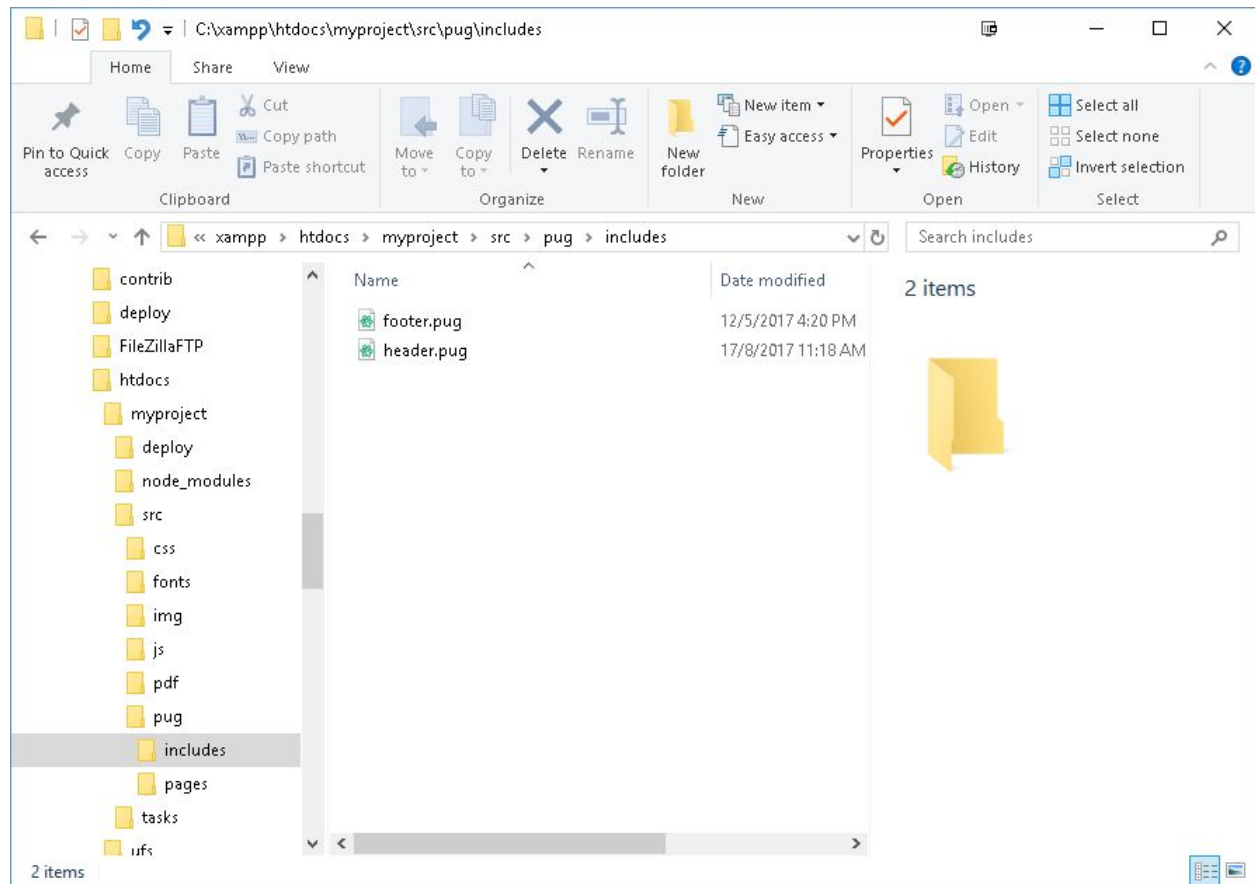
Will be auto compiled with Grunt



5gi. pug/includes folder

This is where I put all the global pug templates

Will be auto compiled with Grunt

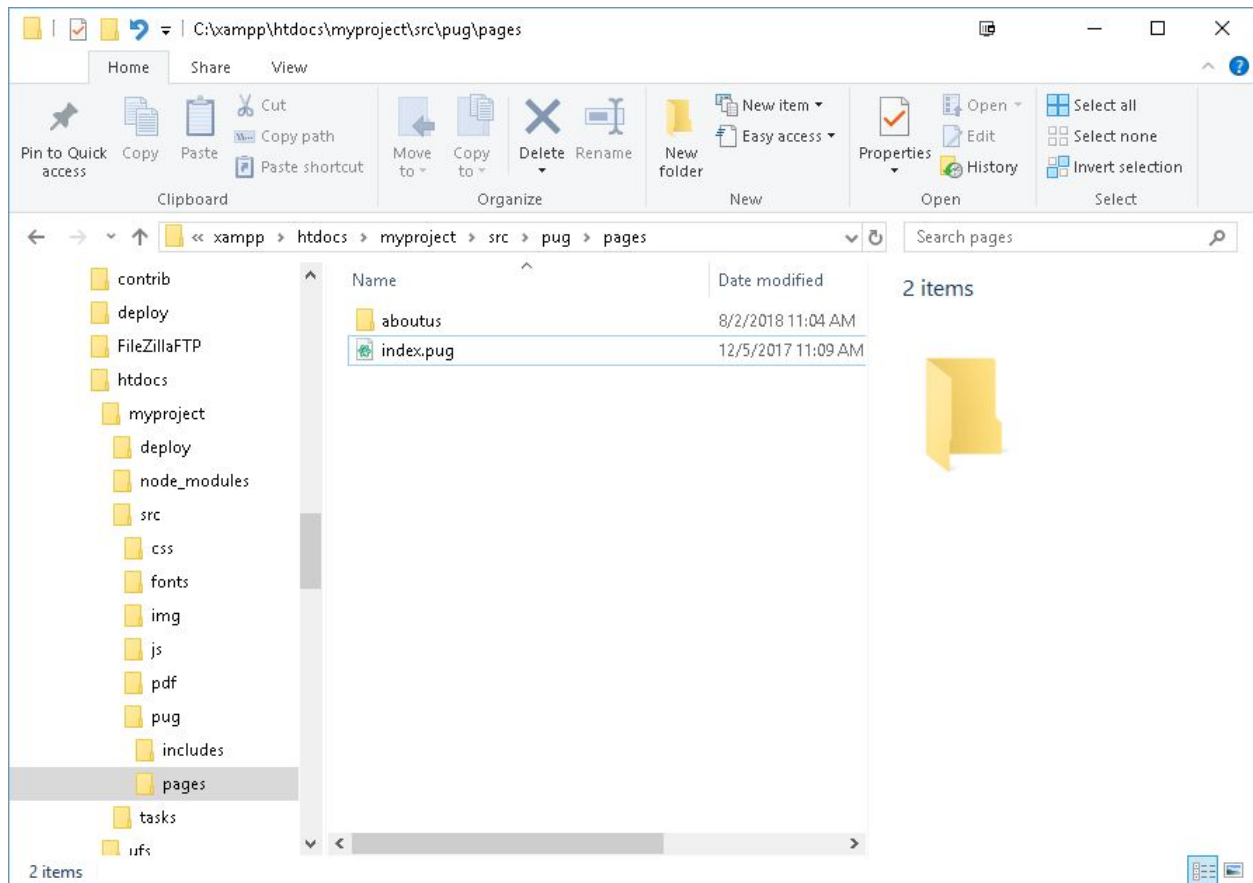


5gii. pug/pages folder

This is where I put all the individual pug

Please feel free to use folders to organise your pug files. These folders will also be added into your deploy folder

Will be auto compiled with Grunt



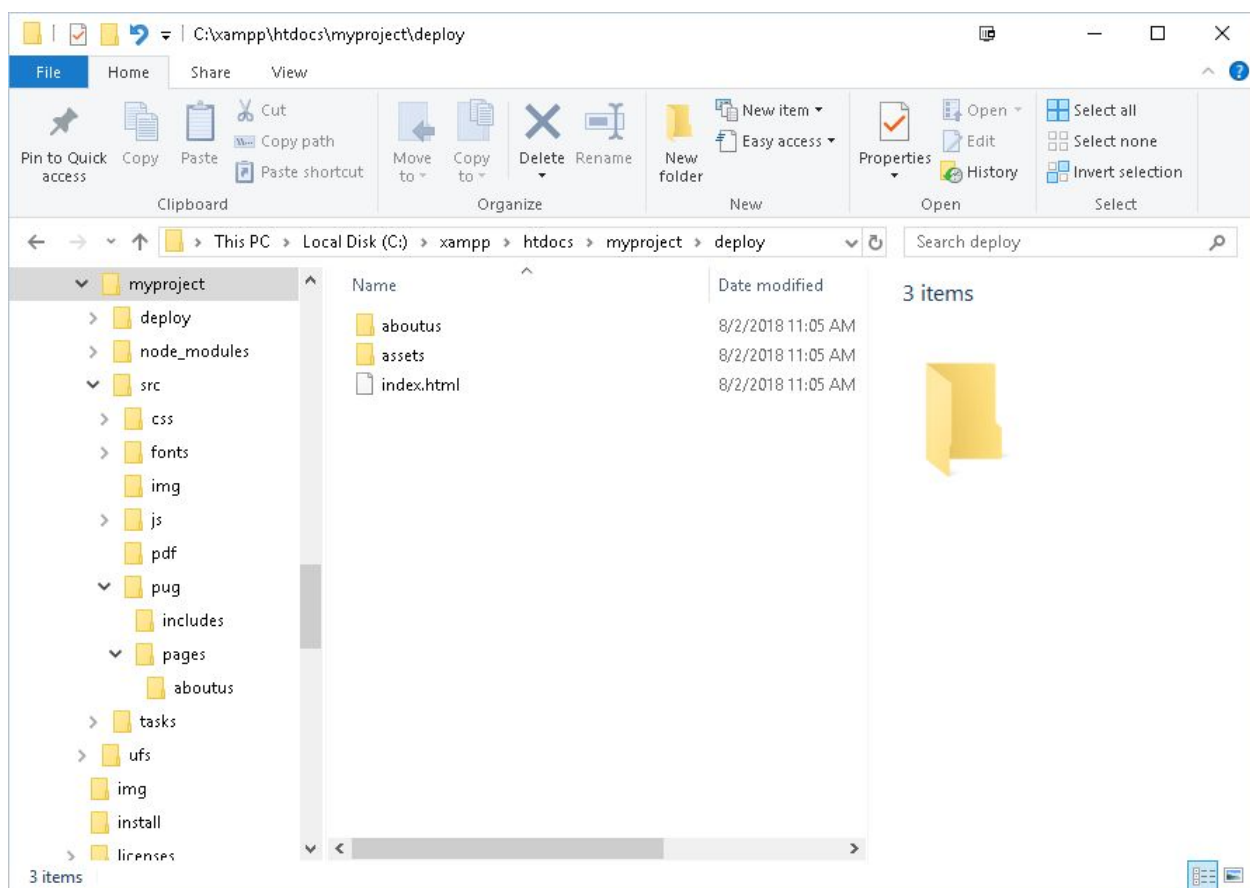
6. Deployment

6a. Deploy folder structure

Contains html folders, assets and htmls

This folder and contents will be recreated every time you run “grunt”. So please **DO NOT** add anything inside

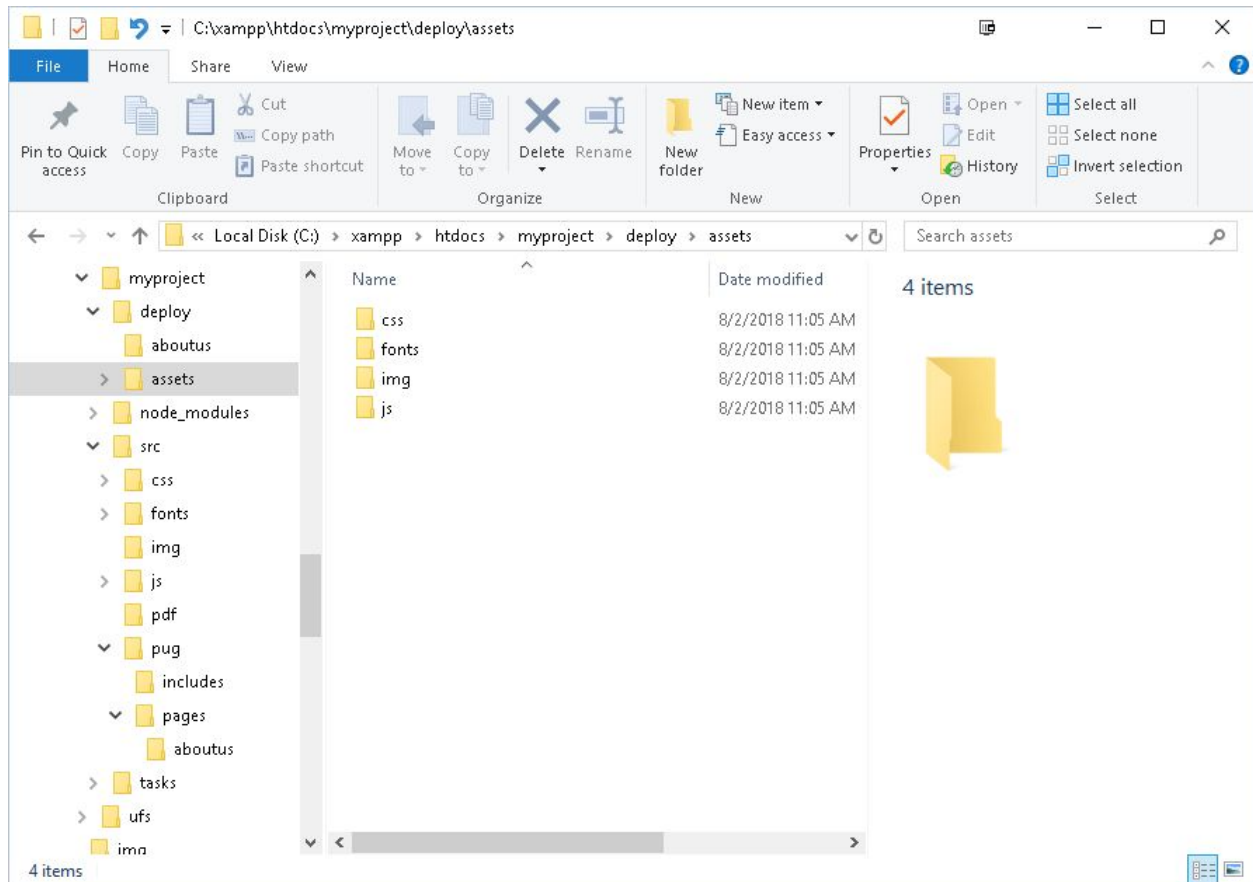
Auto generated with Grunt from your src folder



6b. deploy/assets folder structure

Contains all your assets

Auto generated with Grunt from your src folder

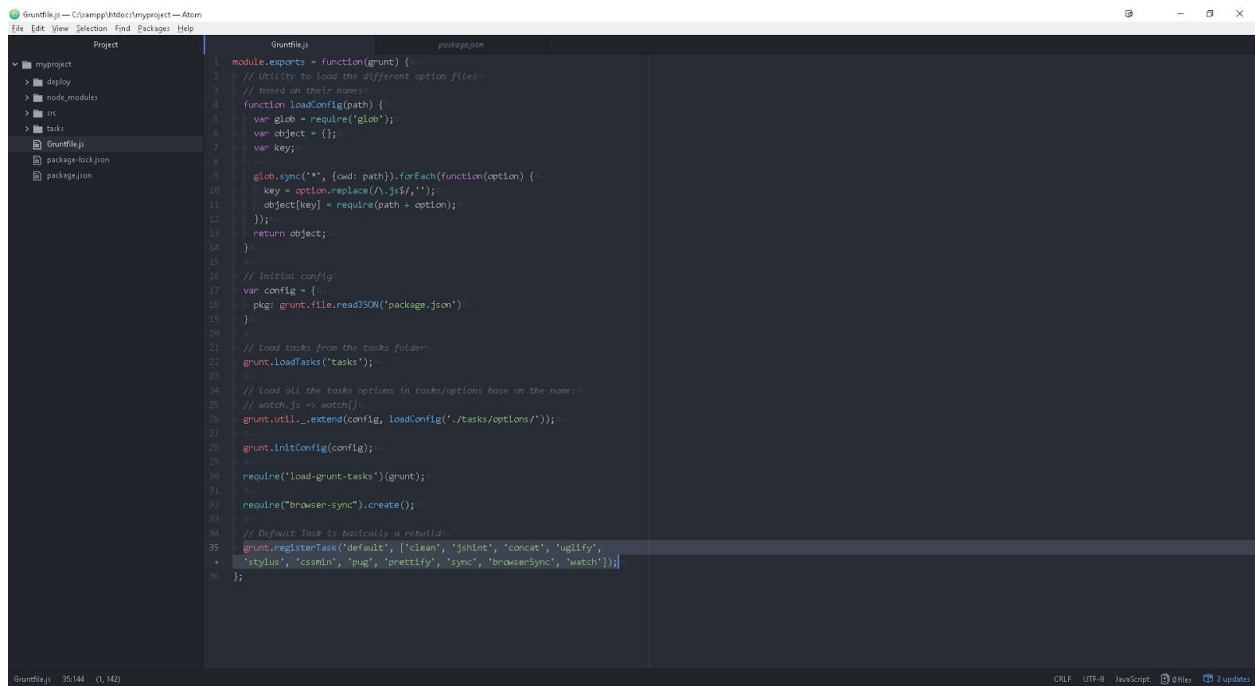


7. Configuring Grunt task

<https://gruntjs.com/plugins>

Details of the plugin config can be found in their doc

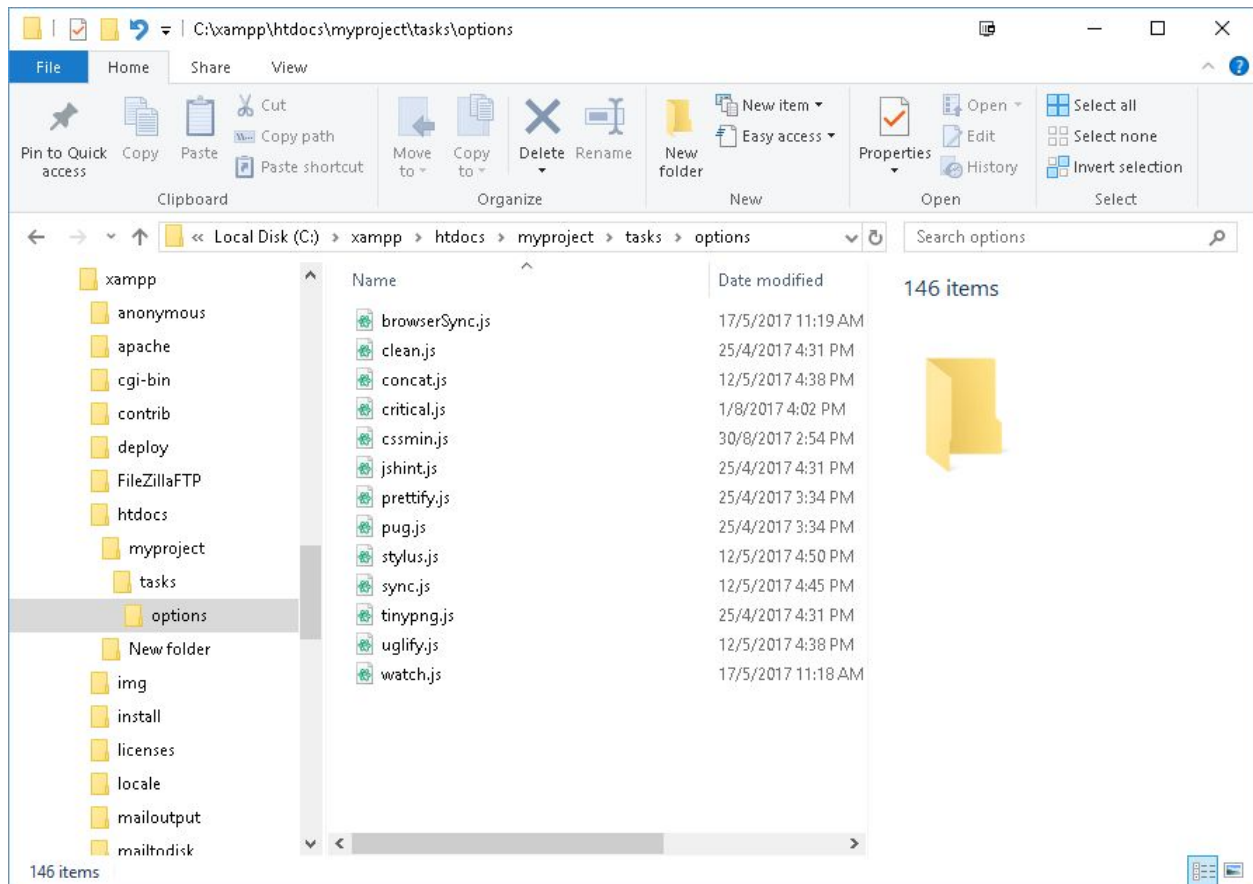
7a. Open Gruntfile.js



```
1 module.exports = function(grunt) {
2   // Utility to load the different option files--
3   // based on their name--
4   function loadConfig(path) {
5     var glob = require('glob');
6     var object = {};
7     var key;
8
9     glob.sync('*', {cwd: path}).forEach(function(option) {
10       key = option.replace(/\.js$/, '');
11       object[key] = require(path + option);
12     });
13     return object;
14   }
15
16   // Initial config
17   var config = {
18     pkg: grunt.file.readJSON('package.json')
19   };
20
21   // Load tasks from the tasks folder
22   grunt.loadTasks('tasks');
23
24   // Load all the tasks options in tasks/options base on the name--
25   // watch.js => watch[]
26   grunt.util._.extend(config, loadConfig('./tasks/options/'));
27
28   grunt.initConfig(config);
29
30   require('load-grunt-tasks')(grunt);
31
32   require('browser-sync').create();
33
34   // Default Task is basically a rebuild
35   grunt.registerTask('default', ['clean', 'jshint', 'concat', 'uglify',
36     'stylus', 'cssmin', 'pug', 'prettify', 'sync', 'browserSync', 'watch']);
37 }
```

Add your new task

7b. New task javascript file



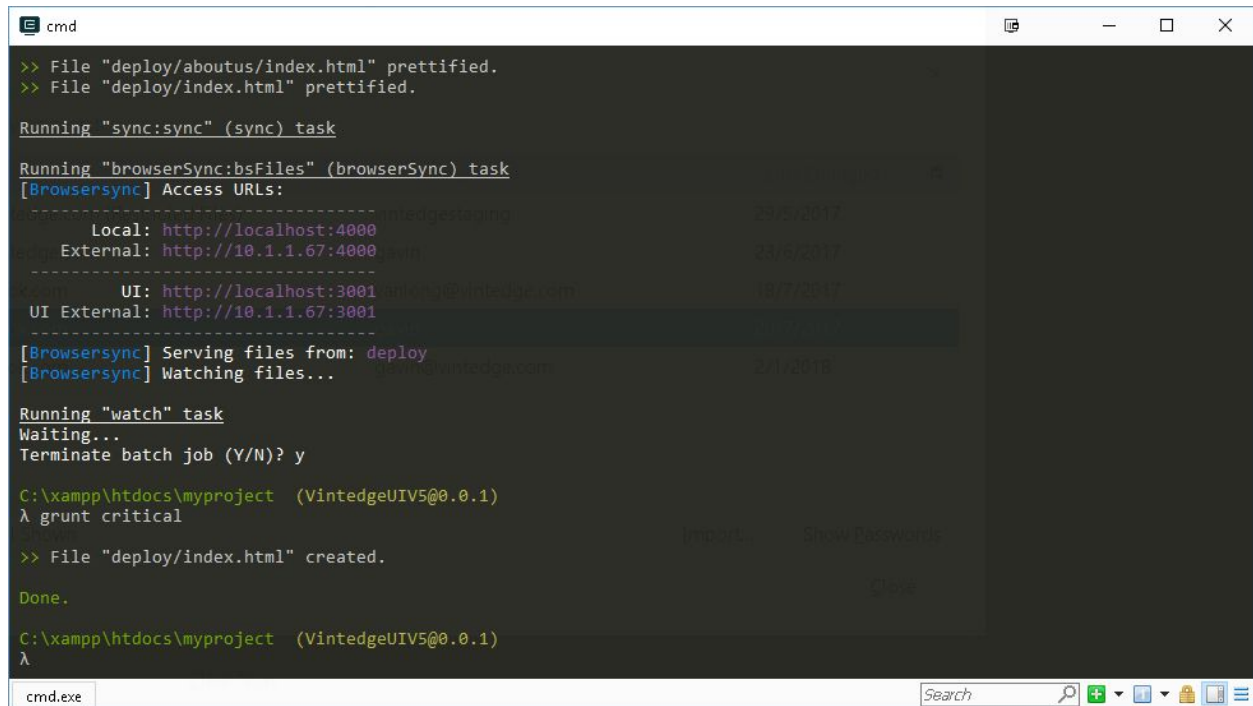
Add your newtask.js here

8. Grunt Critical

7a. Running grunt critical

<https://www.smashingmagazine.com/2015/08/understanding-critical-css/>

grunt critical



```
cmd

>> File "deploy/aboutus/index.html" prettified.
>> File "deploy/index.html" prettified.

Running "sync:sync" (sync) task

Running "browserSync:bsFiles" (browserSync) task
[Browsersync] Access URLs:
   Local: http://localhost:4000
  External: http://10.1.1.67:4000
   UI: http://localhost:3001
  UI External: http://10.1.1.67:3001
[Browsersync] Serving files from: deploy
[Browsersync] Watching files...

Running "watch" task
Waiting...
Terminate batch job (Y/N)? y

C:\xampp\htdocs\myproject (VintedgeUIV5@0.0.1)
λ grunt critical

>> File "deploy/index.html" created.

Done.

C:\xampp\htdocs\myproject (VintedgeUIV5@0.0.1)
λ
```