

# Exercise (Instructions): Grunt Part 1

## Objectives and Outcomes

In this exercise, you will learn to use Grunt, the task runner. You will install Grunt CLI and install Grunt packages using NPM. Thereafter you will configure a Grunt file with a set of tasks to build and serve your web project. At the end of this exercise, you will be able to:

- Install Grunt CLI and Grunt packages in your project
- Configure a Grunt file with a set of tasks to build a web project from a source, and serve the built project using a server.

## Installing Grunt

- At the command prompt, type the following to install Grunt command-line interface (CLI):

```
1 npm install -g grunt-cli@1.2.0
```

- Next, add the following code to Gruntfile.js to set up the file to configure Grunt tasks:

```
1 'use strict';
2
3 module.exports = function (grunt) {
4   // Define the configuration for all the tasks
5   grunt.initConfig({
6
7   });
8 };
```

This sets up the Grunt module ready for including the grunt tasks inside the function above.

## Compiling SCSS to CSS

- Next, we are going to set up our first Grunt task. The SASS task converts the SCSS code to CSS. To do this, you need to include some Grunt modules that help us with the tasks. Install the following modules by typing the following at the prompt:

```
1 npm install grunt-sass
2
3 // Define the configuration for all the tasks
4 grunt.initConfig({
5   sass: {
6     dist: {
7       files: {
8         'css/styles.css': 'css/styles.scss'
9       }
10    }
11  }
12 });
13
14 grunt.registerTask('css', ['sass']);
15
16 };
```

- Now you can run the grunt SASS task by typing the following at the prompt:

```
1 grunt css
2
3 files: css/*.scss,
4 tasks: ['sass']
5 },
6 browserSync: {
7   dev: {
8     bsFiles: {
9     src : [
```

```

10         'css/*.css',
11         '*.html',
12         'js/*.js'
13     ],
14     },
15     options: {

```

- Then add the following task to the Grunt file:

```

1  grunt.registerTask('default', ['browserSync', 'watch']);

```

- Now if you type the following at the command prompt, it will start the server, and open the web page in your default browser. It will also keep a watch on the files in the css folder, and if you update any of them, it will compile the scss file into css file and load the updated page into the browser (livereload)

```

1  grunt

```

- Do a Git commit with the message "Grunt Part 1".

## Conclusions