Demo Script – npm, bower, less, grunt

Step 1: Installing npm:

* Go to <http://nodejs.org/>
* Download the node.js installer according to the OS.
* Install it after it downloads. NPM also comes along with the package.
* Write this command to check whether it is installed correctly or not. This command will tell you about the current version of the npm installed in the system.

**npm --version**

Step 2: Installing Bower:

* Open command prompt and write

**node --version**

**npm --version**

if it tells you about the version you are good to go, otherwise install node as specified in step 1.

* Write

**npm install -g bower**

This will install bower globally in the system.

Step 3: Installing less:

* Open command prompt and write

**npm install -g less**

This will install less globally into the system.

Step 4: Installing Grunt:

* Open command prompt and write

**npm install -g grunt-cli**

This will install the grunt-cli locally into the system.

Step 5: Now to setup our project:

* Open the project root folder
* Create a folder for the less files, and create one less file to write the styles.
* Now to add front-end libraries:
* Open project root folder and create one file named **.bowerrc**, and in this file write the path to folder where you want to add the front-end libraries:

**{**

**“directory”:”path/to/library/here”**

**}**

* Now open command prompt and change directory to project root folder and write (we are installing jQuery and Bootstrap):

**Bower install jquery**

**Bower install bootstrap**

It will install both of the libraries into the folder you specified in the .bowerrc file.

* Now we will make a bower.json file, which will have the information about the front-end libraries we are using for the development. Open command prompt and cd to project root and type:

**bower init**

It will ask you many options fill it up and exit it will create bower.json file for us. This will be used to share with other developers to update their libraries.

* Now we will compile the less files into css using grunt.
* For using grunt we need to open command prompt and cd to project directory root and type:

**npm install grunt --save-dev**

It will install grunt for our project.

* Now we need to create a Gruntfile.js in our project root location and in this file write:

**module.exports = function(grunt) {**

**grunt.initConfig({**

**concat: {**

**dist: {**

**src: [**

**'js/libs/\*.js', // All JS in the libs folder**

**'js/global.js' // This specific file**

**],**

**dest: 'js/build/production.js',**

**}**

**},**

**less: {**

**options: {**

**compress: true,**

**yuicompress: true**

**},**

**development: {**

**files: {**

**"css/media.css": "less/media.less",**

**"css/signin-phone.css": "less/signin-phone.less"**

**}**

**}**

**},**

**watch:{**

**styles: {**

**files: ['less/\*.less'],**

**tasks: ['less:development'],**

**options: { nospawn: true }**

**}**

**}**

**});**

**grunt.loadNpmTasks('grunt-contrib-concat');**

**grunt.loadNpmTasks('grunt-contrib-less');**

**grunt.loadNpmTasks('grunt-contrib-watch');**

**grunt.registerTask('watch-less', ['watch']);**

**};**

And save the file.

* We need to install grunt plugins to run the task we specified in the Gruntfile.js

For that, open the command prompt and cd to your project folder and type:

**Npm install grunt-contrib-concat --save-dev**

**Npm install grunt-contrib-less --save-dev**

**Npm install grunt-contrib-watch --save-dev**

* After these installed, write

**grunt watch-less**

This will start the watchers in the command prompt and will wait for the changes in any less file included in the project and convert them to css.