010 Gulp - copy lib files from node & bower

Gulp Kata List – Blog Page

[Gulp Kata List on GitHub](https://github.com/robertdunaway/katas-gulp)

# Duration

10 minutes

# Brief

In this kata we will copy required libraries from Bower and Node to the destination folder, wwwroot.

### For More Information

BING/GOOGLE: “Gulp ”

Book: <http://www.amazon.com/Gulp-Quick-guide-getting-running/dp/151468960X>

# Instructions

Get tutorial folder or the entire katas-angular2 repo.

Open the [before/\*.sln] file and execute the kata.

Feel free to execute this kata multiple times because repetition creates motor memory.

# Github

* Before (start kata with this)
  + [https://github.com/](https://github.com/robertdunaway/katas-typescript/tree/master/001%20TypeScript%20-%20declare%20variables)
* After
  + [https://github.com/](https://github.com/robertdunaway/katas-typescript/tree/master/001%20TypeScript%20-%20declare%20variables/after)

# Kata

In this kata we will copy files our web site needs to a lib folder in wwwroot.

First let’s update our package.json file with the following new libraries. Visual Studio will pull these npm modules down for us.

"angular2": "2.0.0-beta.0",

"systemjs": "0.19.6",

"es6-promise": "^3.0.2",

"es6-shim": "^0.33.3",

"reflect-metadata": "0.1.2",

"rxjs": "5.0.0-beta.0",

"zone.js": "0.5.10"

Here is the entire package.json when updated.

{

"version": "1.0.0",

"name": "ASP.NET",

"private": true,

"devDependencies": {

"gulp": "^3.9.0",

"angular2": "2.0.0-beta.0",

"systemjs": "0.19.6",

"es6-promise": "^3.0.2",

"es6-shim": "^0.33.3",

"reflect-metadata": "0.1.2",

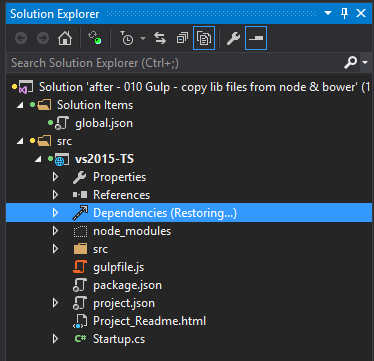
"rxjs": "5.0.0-beta.0",

"zone.js": "0.5.10"

}

}

Visual Studio begins “Restoring…” packages the moment package.json is saved.



We can also add Bower packages. From the command line execute the following statements.

If you have not already installed bower run command npm install bower -g

Now you’re ready to use Bower.

If you don’t already have a bower.json file then run command bower init. You can answer the questions or just press enter through the prompts.

You’re new bower files looks something like this.

{

"name": "ASP.NET",

"description": "",

"main": "",

"authors": [

],

"license": "MIT",

"moduleType": [],

"homepage": "",

"ignore": [

"\*\*/.\*",

"node\_modules",

"bower\_components",

"test",

"tests"

]

}

Now you can add your bower packages.

bower install normalize-css --save

bower install font-awesome --save

bower install jquery --save

bower install lodash --save

We need the following files moved to the wwwroot/libs folder. We also want to keep their folder structure in tact.

bower\_components/normalize-css/normalize.css

bower\_components/font-awesome/css/font-awesome.min.css

bower\_components/font-awesome/fonts/ (all files)

bower\_components/jquery/dist/jquery.min.js

bower\_components/lodash/lodash.min.js

// for angular2

node\_modules/es6-shim/es6-shim.min.js

node\_modules/angular2/bundles/angular2-polyfills.min.js

node\_modules/systemjs/dist/system.src.js

node\_modules/rxjs/bundles/rx.min.js

node\_modules/angular2/bundles/angular2.min.js

node\_modules/angular2/bundles/angular2.dev.js

# Review

Here is how your solution might have turned out.

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

return gulp.src(['bower\_components/\*\*//normalize-css/normalize.css'

, 'bower\_components/\*\*//font-awesome/css/font-awesome.min.css'

, 'bower\_components/\*\*/font-awesome/fonts/\*.\*'

, 'bower\_components/\*\*//jquery/dist/jquery.min.js'

, 'bower\_components/\*\*//lodash/lodash.min.js'

// for angular2

, 'node\_modules/\*\*//es6-shim/es6-shim.min.js'

, 'node\_modules/\*\*//angular2/bundles/angular2-polyfills.min.js'

, 'node\_modules/\*\*//systemjs/dist/system.src.js'

, 'node\_modules/\*\*//rxjs/bundles/rx.min.js'

, 'node\_modules/\*\*//angular2/bundles/angular2.min.js'

, 'node\_modules/\*\*//angular2/bundles/angular2.dev.js'

])

.pipe(gulp.dest('wwwroot/lib/./'));

});

To maintain the folder structure of these libraries we used “/\*\*//” at the base of where we wanted to start the folder structure copy. If you look into the wwwroot/lib you’ll find the files you copies are in the correct folders.

Note

You may or may not have noticed but while Bower flared up as a major contributor to the package management story, many are moving away from it and relying on NPM for all their development plugins and web site libraries. You may have noticed that all the modules for supporting Angular2 came strictly from NPM. The Angular2 team is not using Bower.

# Next

Take a few minutes and imagine more examples.