

A Developer Diary

{about:"code learn and share"}

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May 6, 2016 By [Abhisek Jana](#) — [4 Comments](#) ([Edit](#))

How to setup Angular 2 with TypeScript Development Workspace



Angular 2 has many welcoming new features and dependency on TypeScript. You can surely code using ES5 or ES6 however using TypeScript is most beneficial and the industry is heading towards that. However as we are adapting this new framework, developers often face issues while setting up a workspace. Today we will learn How to setup Angular 2 with TypeScript Development Workspace to make the learning path little easier.

We will use WebPack to build and start a server. However you could use WebPack just to build and deploy the files in your preferred server.

Objective :

Setting up a workspace should be simple and shouldn't have any tool dependency. You should be able to setup Angular 2 with TypeScript in less than 5 mins. We also want to have Bootstrap and JQuery included so that it would be easy to get started with.

Note: There are several ways you can setup Angular 2 with TypeScript, this is just one of the several options.

Prerequisites :

You need to have node (nodejs.org) installed in your local. You don't really need git to work on Angular 2, however I have a small configuration in github to get you started. If you have git command line installed you can download it from there or you can also download the GitHub project as a zip file and get started with that.

Steps to setup Angular 2 with TypeScript in 5 mins

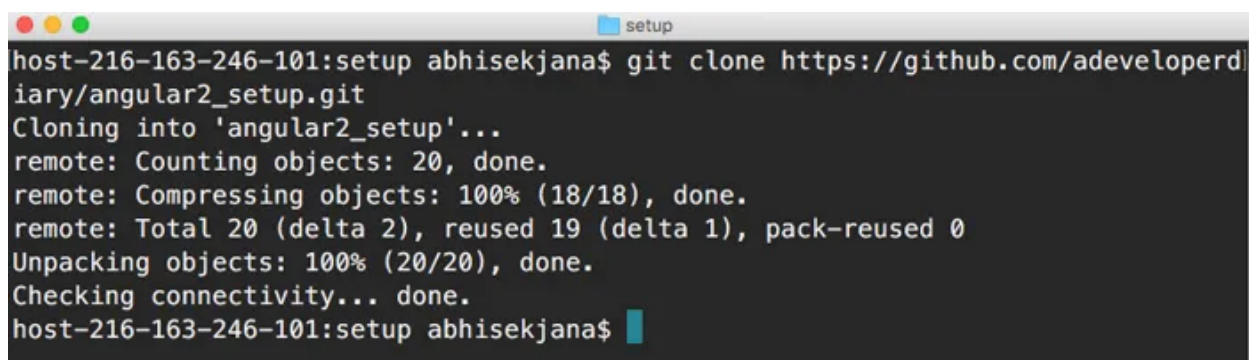
Make sure you have the latest version of the npm installed. You can update with the following command.

```
npm cache clean -f
npm install -g n
n stable
```

Either download the zip file from below git repository or execute the following command to clone the project.

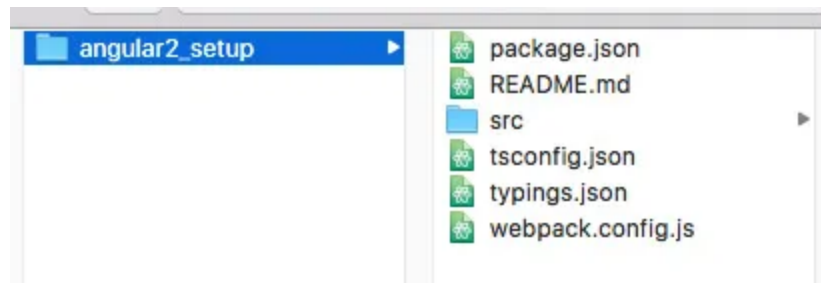
https://github.com/adeveloperdiary/angular2_setup

```
git clone
https://github.com/adeveloperdiary/angular2_setup.git
```

A screenshot of a terminal window titled 'setup'. The terminal shows the command 'git clone https://github.com/adeveloperdiary/angular2_setup.git' being executed. The output indicates that the repository is being cloned into 'angular2_setup', with details about object counting, compression, and unpacking. The process completes successfully, and the prompt returns to the user.

```
host-216-163-246-101:setup abhisekjana$ git clone https://github.com/adeveloperdiary/angular2_setup.git
Cloning into 'angular2_setup'...
remote: Counting objects: 20, done.
remote: Compressing objects: 100% (18/18), done.
remote: Total 20 (delta 2), reused 19 (delta 1), pack-reused 0
Unpacking objects: 100% (20/20), done.
Checking connectivity... done.
host-216-163-246-101:setup abhisekjana$
```

You will find following files have been created.



Now, from Terminal/Command Prompt go into the `angular2_setup` folder and execute the following. It might take a while to install everything.

```
npm install -g webpack webpack-dev-server typings  
typescript
```

Once done, then run `npm install`

```
npm install
```

Then start the server using `npm start`.

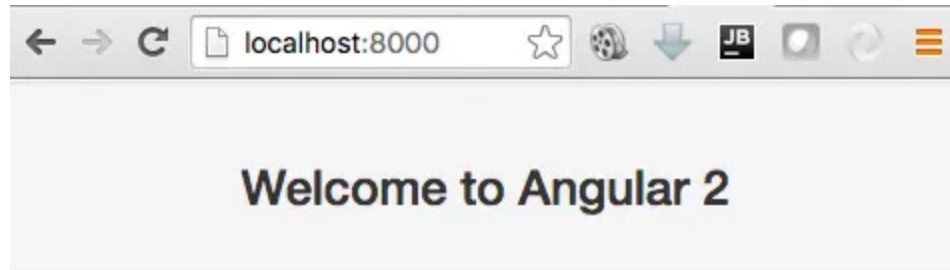
```
npm start
```

The server should start now after a build.

```
[634] ./~/angular2/platform/common.js 279 bytes {2} [built]
[635] ./~/angular2/src/platform/location.js 429 bytes {2} [built]
[636] ./~/angular2/src/platform/browser/location/platform_location.js 1.87 kB {2} [built]
[637] ./~/angular2/src/platform/browser/location/location_strategy.js 1.81 kB {2} [built]
[638] ./~/angular2/src/platform/browser/location/hash_location_strategy.js 5.17 kB {2} [built]
[639] ./~/angular2/src/platform/browser/location/location.js 7.03 kB {2} [built]
[640] ./~/angular2/src/platform/browser/location/path_location_strategy.js 5.39 kB {2} [built]
[641] ./~/angular2/src/router/route_registry.js 23.4 kB {2} [built]
[642] ./~/angular2/src/router/route_config/route_config_impl.js 8.25 kB {2} [built]
[643] ./~/angular2/src/router/rules/rules.js 5.32 kB {2} [built]
[644] ./~/angular2/src/router/url_parser.js 8.85 kB {2} [built]
[645] ./~/angular2/src/router/instruction.js 12.8 kB {2} [built]
[646] ./~/angular2/src/router/rules/rule_set.js 7.39 kB {2} [built]
[647] ./~/angular2/src/router/rules/route_handlers/async_route_handler.js 979 bytes {2} [built]
[648] ./~/angular2/src/router/rules/route_handlers/sync_route_handler.js 778 bytes {2} [built]
[649] ./~/angular2/src/router/rules/route_paths/param_route_path.js 11.9 kB {2} [built]
[650] ./~/angular2/src/router/utils.js 1.27 kB {2} [built]
[651] ./~/angular2/src/router/rules/route_paths/route_path.js 611 bytes {2} [built]
[652] ./~/angular2/src/router/rules/route_paths/regex_route_path.js 1.26 kB {2} [built]
[653] ./~/angular2/src/router/route_config/route_config_normalizer.js 4.13 kB {2} [built]
[654] ./~/angular2/src/router/route_config/route_config_decorator.js 679 bytes {2} [built]
[655] ./~/angular2/src/router/lifecycle/route_lifecycle_reflector.js 819 bytes {2} [built]
[656] ./~/angular2/src/router/lifecycle/lifecycle_annotations_impl.js 1.94 kB {2} [built]
[657] ./~/angular2/src/router/directives/router_outlet.js 9.19 kB {2} [built]
[658] ./~/angular2/src/router/lifecycle/lifecycle_annotations.js 2.05 kB {2} [built]
[659] ./~/angular2/src/router/directives/router_link.js 4.25 kB {2} [built]
[660] ./~/angular2/src/router/router_providers_common.js 1.61 kB {2} [built]
[661] ./~/angular2/src/router/router_providers.js 1.26 kB {2} [built]
[662] ./~/angular2/src/platform/browser/location/browser_platform_location.js 4.07 kB {2} [built]
[663] ./~/jquery/dist/jquery.js 259 kB {2} [built]
[664] ./~/bootstrap/dist/js/bootstrap.js 69 kB {2} [built]
webpack: bundle is now VALID.
```

Open browser and navigate to `http://localhost:8000/`. You can change WebPack's configuration to use a different port.

You should be able to see the app working.



Now open another terminal and run the following. This will look for any change in the workspace file. This is needed when you are not running the server and need to compile the files. If you are not using WebPack server then also this command will help you build your files once saved.

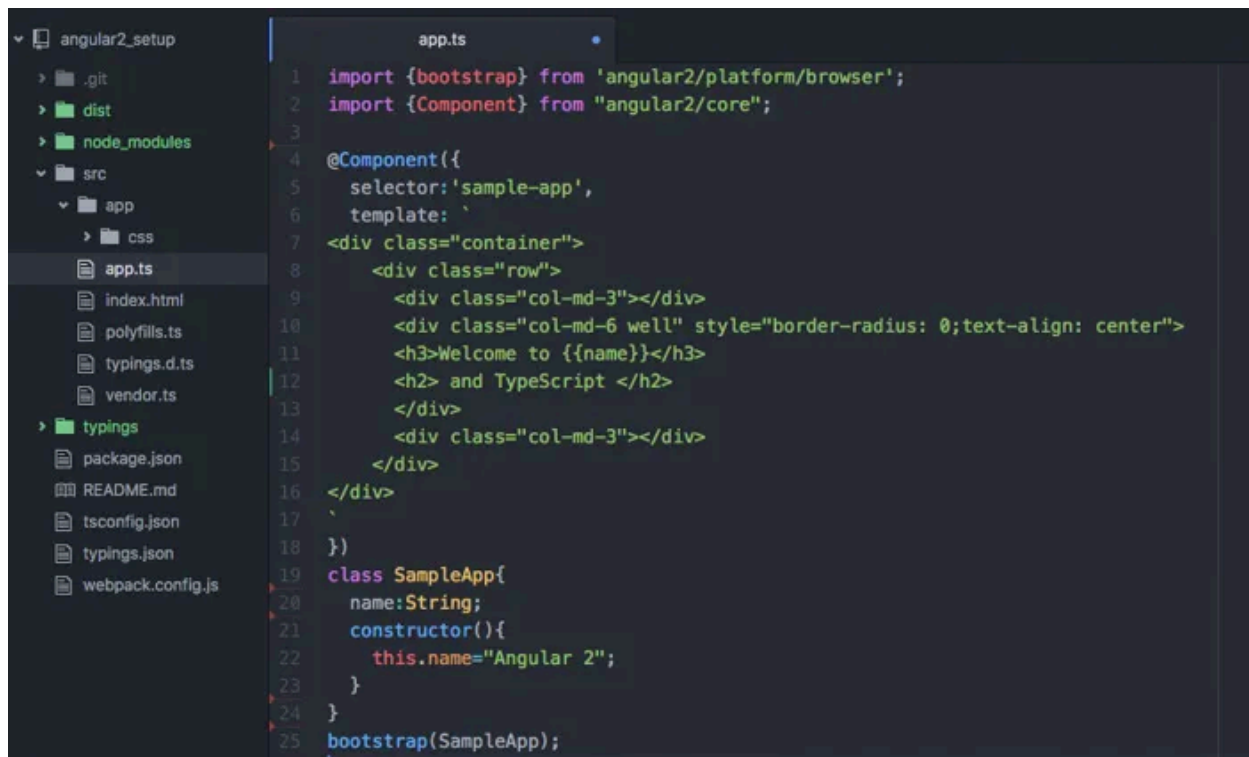
`npm run build -- --watch`

```
host-216-163-246-101:angular2_setup abhisekjana$ npm run build -- --watch
> setup_angular2@1.0.0 build /Users/abhisekjana/Documents/blog/diary/posts/2016/Angular2_setup/setup/angular2_setup
> node node_modules/webpack/bin/webpack.js --inline --colors --progress --display-cached --display-error-details "--watch"

Hash: 5582f85b44f4c12a3014
Version: webpack 1.13.0
Time: 5445ms

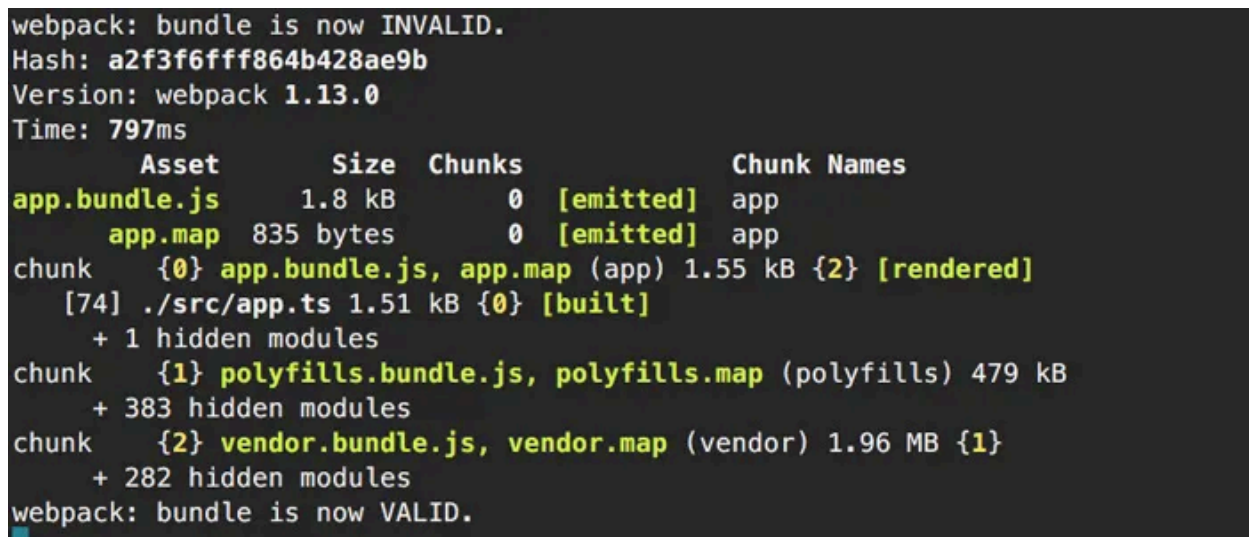
   Asset      Size  Chunks             Chunk Names
  app.bundle.js  1.65 kB      0  [emitted]    app
polyfills.bundle.js  302 kB      1  [emitted]  polyfills
  vendor.bundle.js  2.02 MB      2  [emitted]    vendor
      app.map    836 bytes      0  [emitted]    app
  polyfills.map   379 kB      1  [emitted]  polyfills
      vendor.map  2.05 MB      2  [emitted]    vendor
+ 593 hidden modules
```


Use your favorite editor and open the `app.ts` file. I am using Atom here. Add warp and TypeScript using `h2` element after the `h3` element.



```
1 import {bootstrap} from 'angular2/platform/browser';
2 import {Component} from "angular2/core";
3
4 @Component({
5   selector: 'sample-app',
6   template: `
7     <div class="container">
8       <div class="row">
9         <div class="col-md-3"></div>
10        <div class="col-md-6 well" style="border-radius: 0;text-align: center">
11          <h3>Welcome to {{name}}</h3>
12          <h2> and TypeScript </h2>
13        </div>
14        <div class="col-md-3"></div>
15      </div>
16    </div>
17  `
18 })
19 class SampleApp{
20   name:String;
21   constructor(){
22     this.name="Angular 2";
23   }
24 }
25 bootstrap(SampleApp);
```

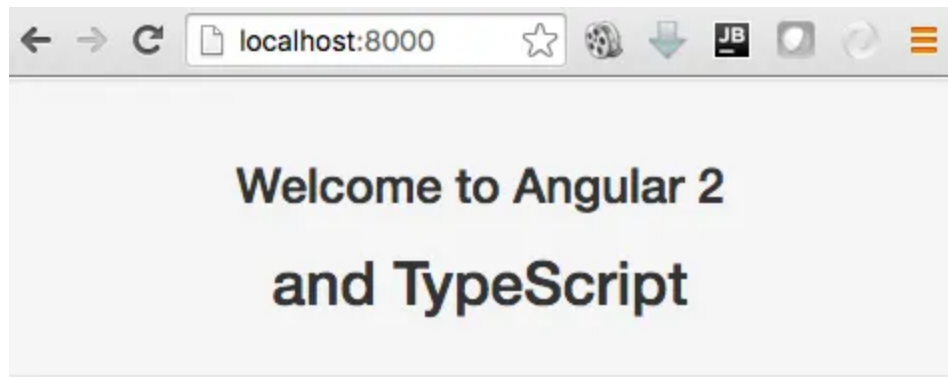
Automatic build will happen which will publish the changes and refresh the browser automatically.



```
webpack: bundle is now INVALID.
Hash: a2f3f6fff864b428ae9b
Version: webpack 1.13.0
Time: 797ms

   Asset      Size  Chunks             Chunk Names
app.bundle.js  1.8 kB      0  [emitted]      app
  app.map    835 bytes      0  [emitted]      app
chunk    {0} app.bundle.js, app.map (app) 1.55 kB {2} [rendered]
  [74] ./src/app.ts 1.51 kB {0} [built]
    + 1 hidden modules
chunk    {1} polyfills.bundle.js, polyfills.map (polyfills) 479 kB
    + 383 hidden modules
chunk    {2} vendor.bundle.js, vendor.map (vendor) 1.96 MB {1}
    + 282 hidden modules
webpack: bundle is now VALID.
```

Here is the output.



Conclusion :

Hope this How to setup Angular 2 with TypeScript Development Workspace would help you to start your development work. Once I find more efficient ways of setting up Angular 2 with TypeScript I will update you. I am using a superset of angular seed project, added Bootstrap and JQuery.

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Comments



John G says

June 7, 2016 at 2:32 am

(Edit)

Very clean and helpful!

Please show how to change the Dev environment into a Production environment.

Reply



A Developer Diary says

June 10, 2016 at 4:03 am

(Edit)

Hi John,
Thanks for your feedback.

The production env setup would depend on your software delivery automation tools stack, e.g – Maven, Ant, Gradle. I will have another post on how to setup Angular 2 in prod env.

Reply



kirti says

September 10, 2016 at 5:53 am

(Edit)

very hepful

Reply



Stas says

April 26, 2021 at 10:52 am

(Edit)

I recommend Codelobster IDE – <http://www.codelobster.com/angular.html>

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