Front-End Essentials

Lab Guides

Document Code	25e-BM/HR/HDCV/FSOFT
Version	1.1
Effective Date	8/1/2019

Hanoi, 04/2019

RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1	25/Jun/2018	Create a new Lab	Create new	DieuNT1	VinhNV
2	01/May/2019	Update Fsoft Template	Update	DieuNT1	VinhNV
3	01/Aug/2019	Update for relase	Release	DieuNT1	VinhNV

Contents

CODE:	FEFW_Angular.M.L0201
TYPE:	Medium
LOC:	200
DURATION:	90 MINUTES

Day 2. Unit 2 – Angular Overview

Objectives

- Understand the overview architecture of Angular
- Understand what is Single Page Application
- Able to create angular project using Angular CLI
- Understand basic concepts in Angular: Component, Directive
- Understand 4 ways of Data Binding
- Able to use built-in Angular Directive

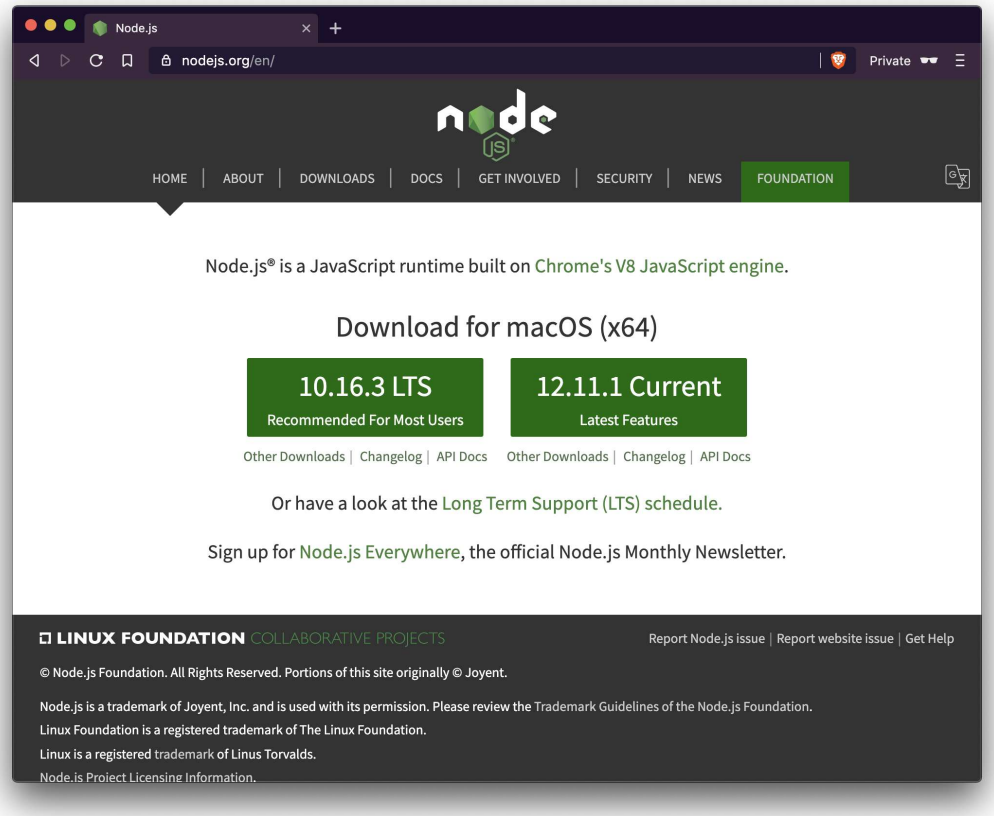
Specifications

Create a sample Angular application.

Guidelines

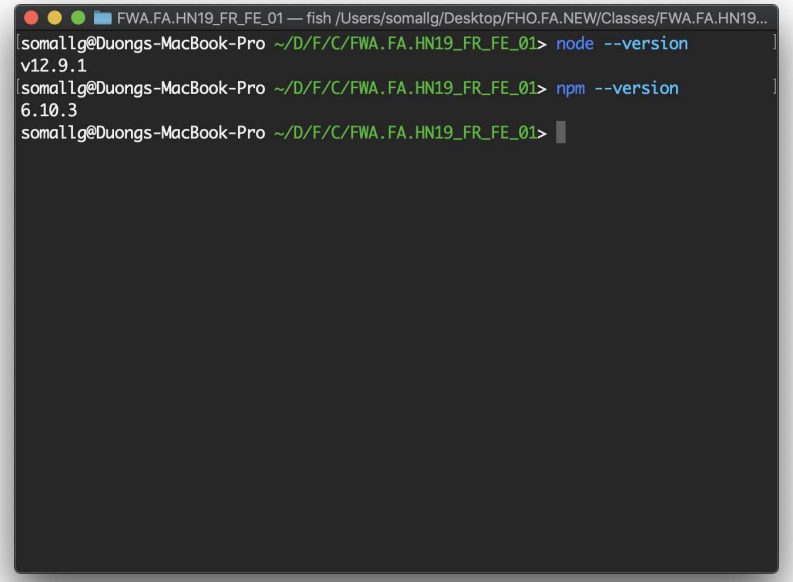
Step 1: Install NodeJS

Navigate to https://nodejs.org/en/ then download and install NodeJS latest version corresponding to your OS.



Step 2: Verify NodeJS

Open Terminal and verify that NodeJS is properly installed. If yes, you should have **node** and **npm** command line like figure below:



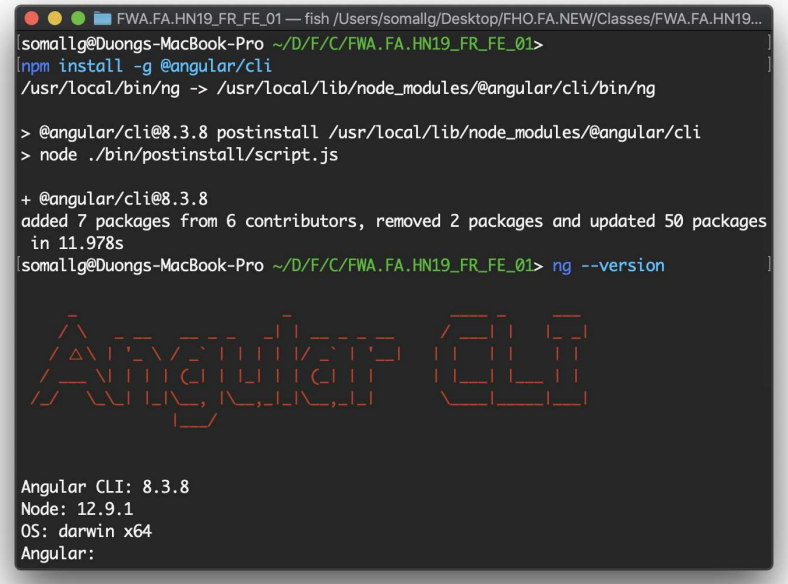
Step 3: Install Angular CLI

Install Angular CLI by typing the following command line:

```
1. npm install -g @angular/cli
```

Verify that Angular CLI is installed by typing:

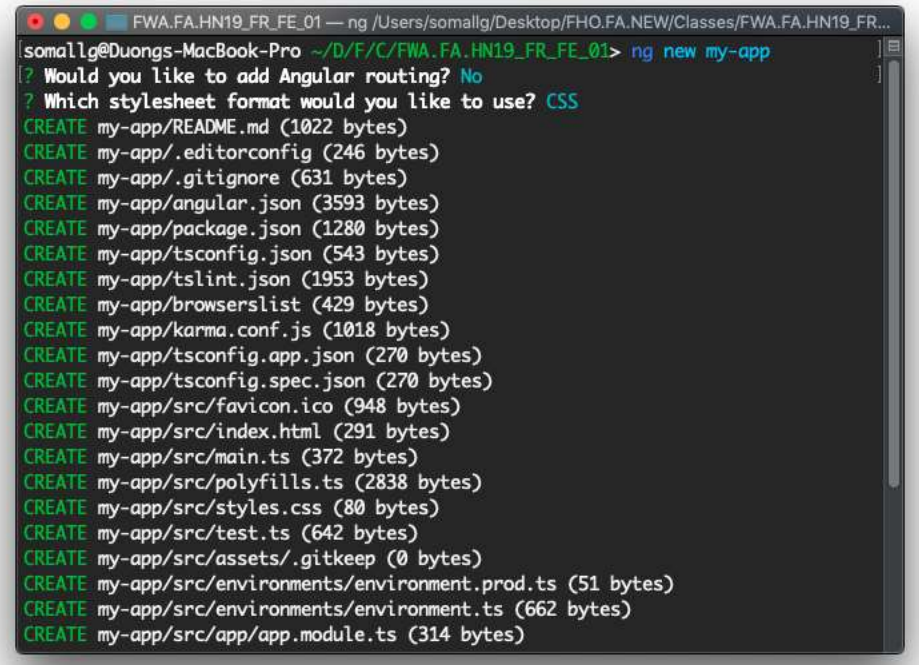
```
1. ng --version
```



Step 4: Create Angular app using Angular CLI

Use ng command line to create new Angular app:

```
1. ng new my-app
```



Step 5: Start Angular app

Change working directory to newly created project:

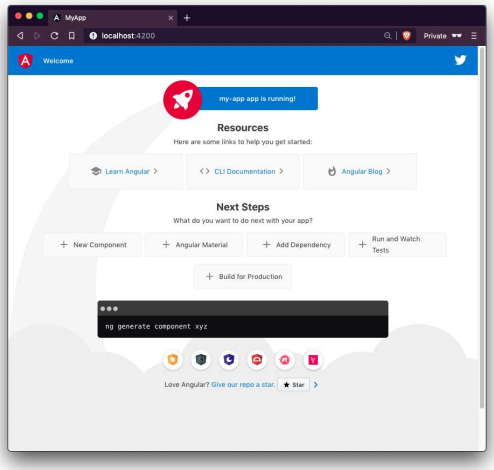
```
1. cd my-app/
```

and type command below:

```
1. ng serve
```

Angular will build the app and host it in port **4200** (default port). Open Chrome browser and navigate to http://localhost:4200

You should have the similar result like figure below:

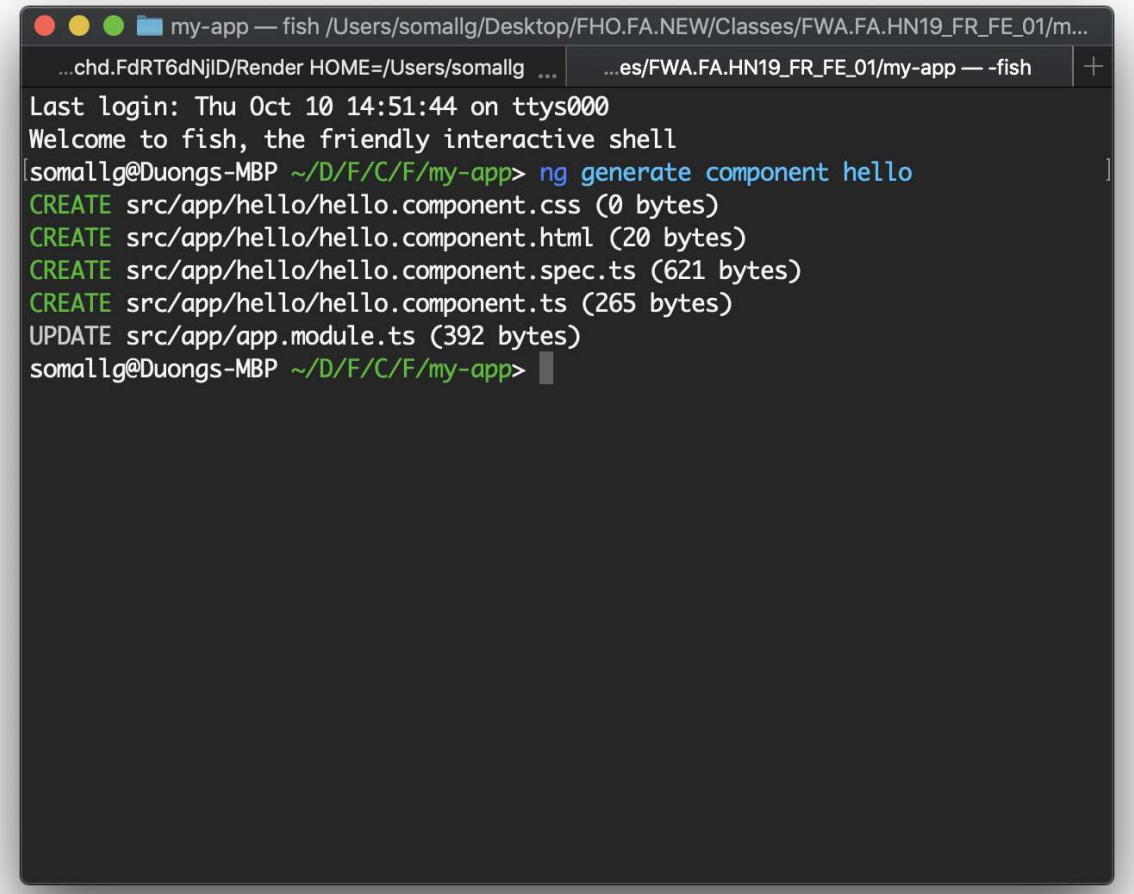


Step 6: Create new Component

Create a new Component by using the following command:

```
1. ng generate component hello
```

You should see similar output:



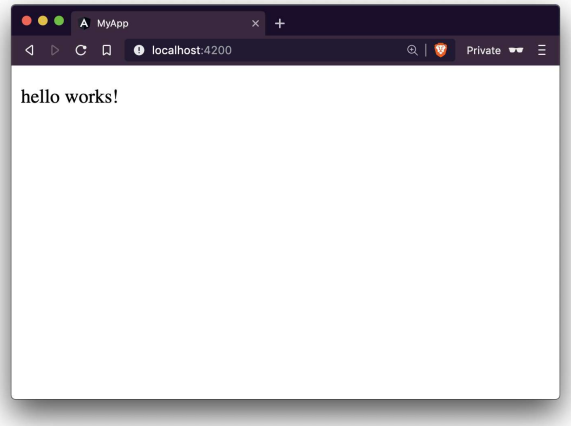
Step 7: Use newly created Component

Open Visual Studio Code, and open **src/app/app.component.html** file.

Remove all the content and put in the following content:

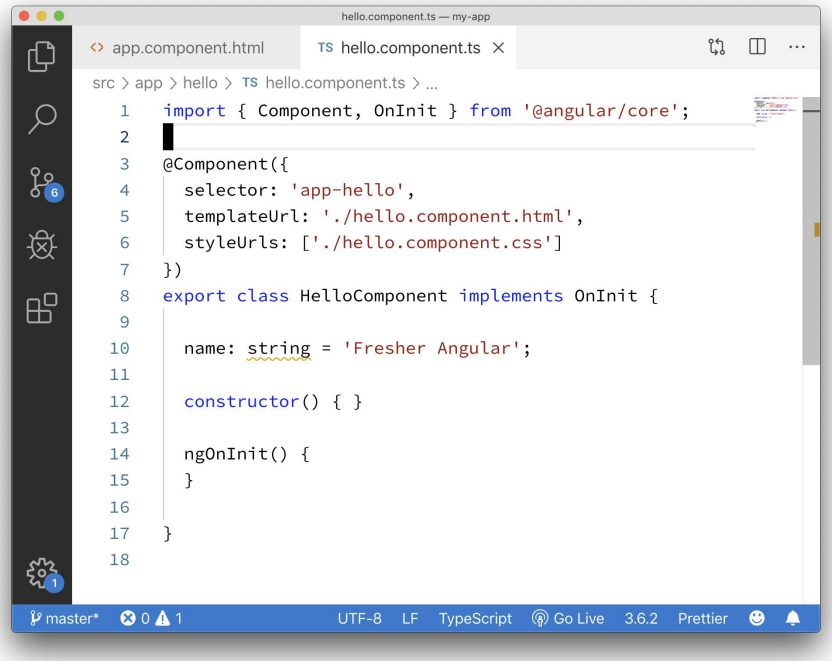
```
1.  <app-hello></app-hello>
```

Save the file, check Chrome browser, you should see something like figure below:

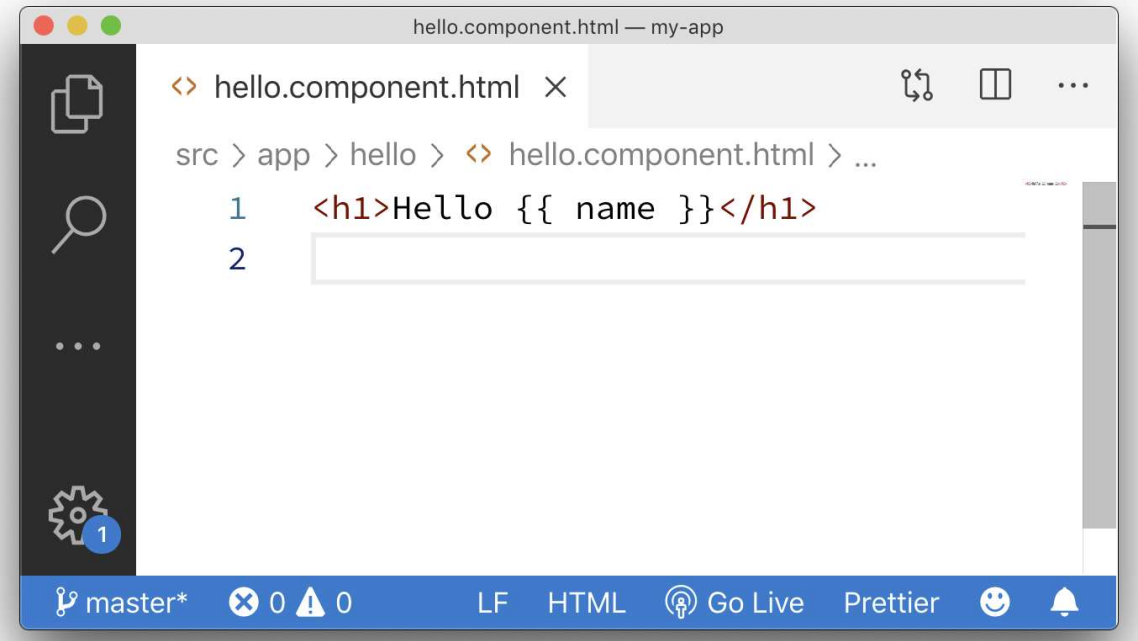


Step 8: Data Binding using Interpolation

Open **src/app/hello/hello.component.ts** file, inside HelloComponent class declare a new field called name with value 'Fresher Angular'



We want to display value of variable name into HTML, open **hello.component.html** file and type the below content:

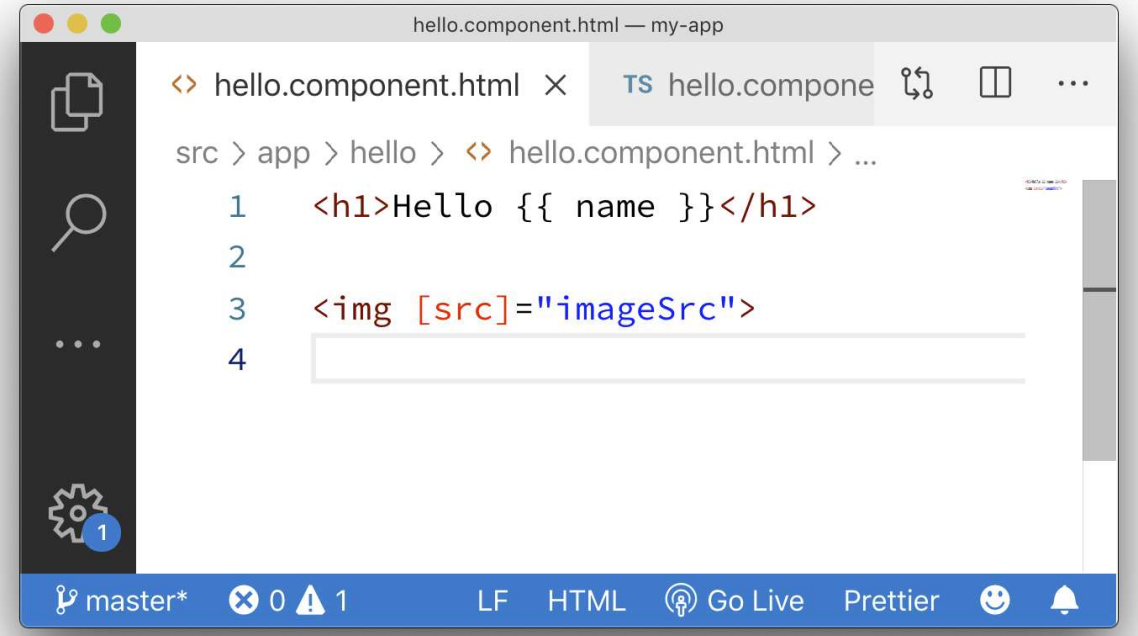


Check Chrome Browser, you should see **Hello Fresher Angular**

Step 9: Data Binding using Property Binding

Same like previous Step, now you must declare a field named **imageSrc** with value: http://placekitten.com/200/300

Then in **hello.component.html** file, create a new **img** tag like so:



Check Chrome browser, you should see an image of cat.

Step 10: Data Binding using Event Binding

Step 11: Data Binding using 2 Way data Binding

Step 12: Using ngStyle

Step 13: Using ngClass

Step 14: Using ngFor

Step 15: Using ngIf

Step 16: Create sample Animation

Step 17: Review