Angular 2 Kickstart

CLI, Concepts, Tools

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Application Architect

Oildex

A cloud service company for oil and gas

- 1 year

Formerly:

Time Warner Cable

(now Charter)

- 12 years

Experience

☎

- Worked on streaming media (Voice over IP), 6 years
- 5 million phone customers

Experience

🎥

- Worked on video and streaming video, 4 years

Projects

twctv.com

- Video streaming website
  - backbone.js
- Video streaming Set-Top Box (STB) web application

Oildex Projects

- Rewrite 10+-year-old apps
- Angular 1.5
    - Component Router
    - ES5
- Angular 2 Prototype
    - Typescript
- Some ES6 in tests

We will cover

- `angular-cli`
- Code Walkthrough
- Tools

angular-cli

angular-cli

- Based on `ember-cli`
- beta

Angular 2 code generator

- Applications
- Components
- Directives
- Pipes
- Services
- Routes
- Unit Tests
- Protractor Tests

Angular 2 Tools

- Build
- Unit Tests
- Protractor Tests
- Deployment
- Lint
  - Style Guide Checker
- Type Definitions
- Code Formatter
- CSS Preprocessors

Install

```
npm install -g angular-cli
```

Help

```
ng --help
```

Upgrading Angular CLI

```
npm uninstall -g angular-cli
npm cache clean
npm install -g angular-cli@latest
```

Generate New App

```
ng new PROJECT_NAME
cd PROJECT_NAME
```

Serve

```
ng serve
```

Code Walkthrough

Application

```
./src/app/
        /angular2-kickstart.component.css
        /angular2-kickstart.component.html
        /angular2-kickstart.component.spec.ts
        /angular2-kickstart.component.ts
        /environment.ts
        /index.ts
        /shared/
                /index.ts
```

Bootstrapping

```
./src/index.html
     /main.ts
```

Config

```
./angular-cli.json
./package.json
./tslint.json
./typings.json
./config/
```

`index.html`

Base

```html
<base href="/">
```

`index.html`

Root Component

`<angular2-kickstart-app>`Loading...`</angular2-kickstart-app>`

`index.html`
System Loader

```javascript
System.import('system-config.js').then(function () {
  System.import('main');
}).catch(console.error.bind(console));
```

Bootstraping

/src/main.ts

```typescript
import { bootstrap } from '@angular/platform-browser-dynamic';
import { enableProdMode } from '@angular/core';
import { Angular2KickstartAppComponent, environment } from './app/';

if (environment.production) {
  enableProdMode();
}

bootstrap(Angular2KickstartAppComponent);
```

Root Component

src/app/angular2-kickstart.component.ts

```typescript
import { Component } from '@angular/core';

@Component({
  moduleId: module.id,
  selector: 'angular2-kickstart-app',
  templateUrl: 'angular2-kickstart.component.html',
  styleUrls: ['angular2-kickstart.component.css']
})
export class Angular2KickstartAppComponent {
  title = 'angular2-kickstart works!';
}
```

Tools

Tools

- Build
- Unit Tests
- Protractor Tests
- Lint
    - Style Guide Checker
- Type Definitions
- CSS Preprocessors
- Deployment

Build

```
ng build
```

Unit Tests

```
ng test
```

Protractor Tests

`ng` `e2e`

Lint and Style Guide Checker

`ng lint`

Generate Another Component

```
ng generate component my-new-component
```

Hook Up Component

- `import` into root component
- Put a selector in the root template
- Add to root component's `directive` array

Generate A Service

```
ng generate service my-new-service
```

Generate A Route

```
ng generate route first-route
```

Upgrading Angular Apps

```
rm -rf node_modules dist tmp
npm install --save-dev angular-cli@latest
ng init
```

Questions?