Architecture

Setup Angular

```
sudo npm install -g @angul -
ar/cli
```

```
npm install --save @angul ar/ -
mat erial @angul ar/cdk @angul -
ar/ ani mations hammerjs
```

Create New Project

```
ng new {name} --styl e=scss
```

`npm init`, create package.json

Run

`ng serve`, run local dev server at localh-ost:4200

`ng build`, build dist bundlers

Modules are compound of

-> Components

-> Services

Components

https://angular.io/guide/component-overview

Generate Component

```
$ ng generate component {name}
```

A component consist of

☐ A component class (Typescript class)

☐ A template

☐ A css selector that indicates how the component will be integrated

☐ Optional css styles applied to the template

Services

Generate Service

```
$ ng generate service {path}
```

Data Binding

https://angular.io/guide/architecture-comp-onents#data-binding

https://angular.io/guide/template-syntax#m-ore-on-template-syntax

Interpolation

`{{expression}}` displays on the template the value of a expression (a component's property).

Property binding

`[prope rty ]="e xpr ess ion "` set value of expression for properties of template elements (html, material, etc.).

E.g.: `<img alt="it em" [src]= " -ite mIm age Url ">`

Event binding

`(event )="h and le()"` bind DOM events with handlers.

Two way binding

`[(targ et) ]="e xpr ess ion "` combines property with event bindings. Used in template driven forms; *target* is usually `ngModel`.

Forms

Template-Driven Forms

https://angular.io/guide/forms

https://angular.io/guide/form-validation

https://material.angular.io/components/form-field/overview

Reactive Forms

https://angular.io/guide/reactive-forms

https://angular.io/guide/rx-library

Routing

https://angular.io/guide/router

https://angular.io/guide/router#activated--route

HTML5 History API

Provide ability to modify a website's URL without a full page refresh

`pushSt ate()`: Add history entry

`replac eSt ate()`: Modify history entry

Routes

`{path: " /ho me", component: HomeCo mpo nent}` in router module

`<ro ute r-o utl et> </r out -er- out let>` inserts the navigation in app's template

`<a router Lin g="p ath " >click here</ a>` links in template.

path can be a string (like '/home') or an array (like ['/dish', dish.id])

Networking

json-server

https://angular.io/guide/http

https://angular.io/guide/http#making-a-put-request

More...

Attribute directives (Directives)

Animations

Webpack in Angular

`ng build`, build /dist folder (`ng build --help`)