Angular 2

What is angular?

Angular is a framework for building client applications in HTML and either JavaScript or a language like TypeScript that compiles to JavaScript.

The architecture diagram identifies the eight main building blocks of an Angular application:

1. Modules:
2. Components
3. Templates
4. Metadata
5. Data binding
6. Directives
7. Services
8. Dependency injection

# sModules

In angular system modules are called NgModules.

NgModule is a decorator function that takes a single metadata object whose properties describe the module. The most important properties are:

* declarations - the view classes that belong to this module. Angular has three kinds of view classes: **components**, **directives**, and **pipes**.
* exports - the subset of declarations that should be visible and usable in the component **templates** of other modules.
* imports - other modules whose exported classes are needed by component templates declared in this module.
* providers - creators of **services** that this module contributes to the global collection of services; they become accessible in all parts of the app.
* bootstrap - the main application view, called the root component, that hosts all other app views. Only the root module should set this bootstrap property.

What is Npm?

Npm, or node package manager: is a command line utility that interacts with a repository of open source projects, Become the package manager for JavaScript. Using npm we can install libraries, packages, and applications, along with their dependencies.

<https://angular.io/tutorial/toh-pt4>

The @Injectable() decorator tells TypeScript to emit metadata about the service. The metadata specifies that Angular may need to inject other dependencies into this service.

<https://angular.io/tutorial/toh-pt3>

In general, the declarations array contains a list of application components, pipes, and directives that belong to the module. A component must be declared in a module before other components can reference it.

What is the difference between annotation and decorator?

TypeScript

What is TypeScript?

TypeScript is a typed superset of JavaScript that compiles to plain JavaScript.

What is operator?

An operator defines some function that will be performed on the data.

Object Oriented:

**Method:** Methods are functions that run in context of an object. To call a method on an object, we first have to have an instance of that object.

**Constructor:**

A *constructor* is a special method that is executed when a new instance of the class is being created.Usually, the constructor is where you perform any initial setup for new objects.Constructor methods must be named constructor. They can optionally take parameters but they can’t return any values, since they are called when the class is being instantiated.

**Inheritance** is a way to indicate that a class receives behavior from a parent class. Then we can override, modify or augment those behaviors on the new class.

Book

## Agular CLI:

<https://github.com/angular/angular-cli>

To create a new project $ ng new angular-hello-world

**Run application:**

$ ng serve

\*\* NG Live Development Server is running on http://localhost:4200. \*\*

Port 4200 is already in use. Use '--port' to specify a different port

$ ng serve --port 9001

http://localhost:9001

To generate hello-world component

$ ng generate component hello-world

A basic Component has two parts:

1. A Component annotation

2. A component definition class

to pass data into the child component. (page 25)

Angular provides a way to do this: the @Input annotation