# Angular UI Framework 8.0

Let's build UI Smartly

Prerequisites: HTML,CSS, JavaScript (basics)

#### Agenda

- 1. Angular Framework
- 2. Elements of Angular Framework
- 3. Set Up your Environment
- 4. Angular programing elements
  - 1. Modules
  - 2. Component
  - 3. Data Binding
  - 4. Directives
  - 5. Service
  - 6. Dependency Injection

What is Angular?

Angular is a platform and framework for building client applications in HTML and TypeScript.

Angular is written in TypeScript. It implements core and optional functionality as a set of TypeScript libraries that you import into your apps.

Great for Single Page Applications(SPA)

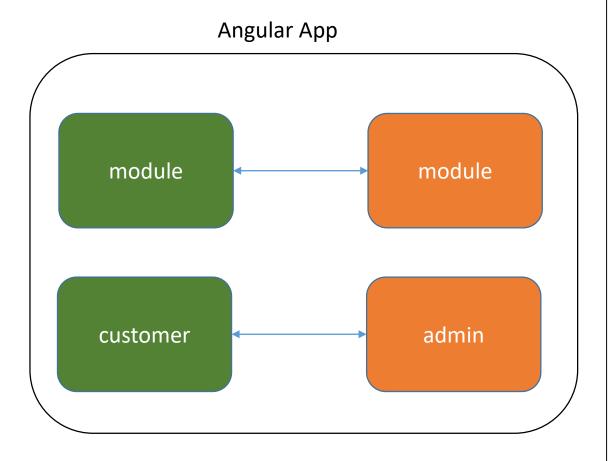
## Development Environment

- Node JS
- npm
- Angular CLI
- An Editor (like Visual Studio Code)
- Steps
  - Install Node JS (Latest Stable)
  - Open a command Prompt and install Angular CLI
  - npm install –g @angular/cli

# Angular Architecture

**Building Blocks of Angular** 

#### Modules



- Angular Applications are collection of modules
- Each application has one or more modules
- One application will have at least one module
- Every Angular application has one root module named as AppModule

Root Module → AppModule

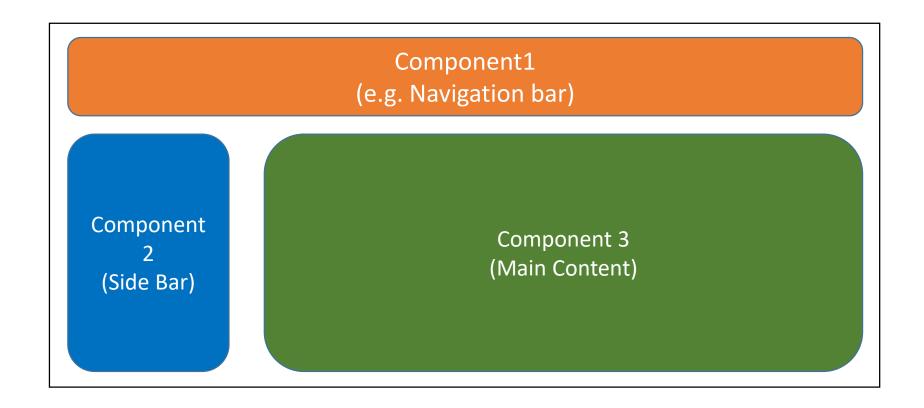
Modules are written in TypeScript

Files are Named as .module.ts

e.g. app.module.ts → root module

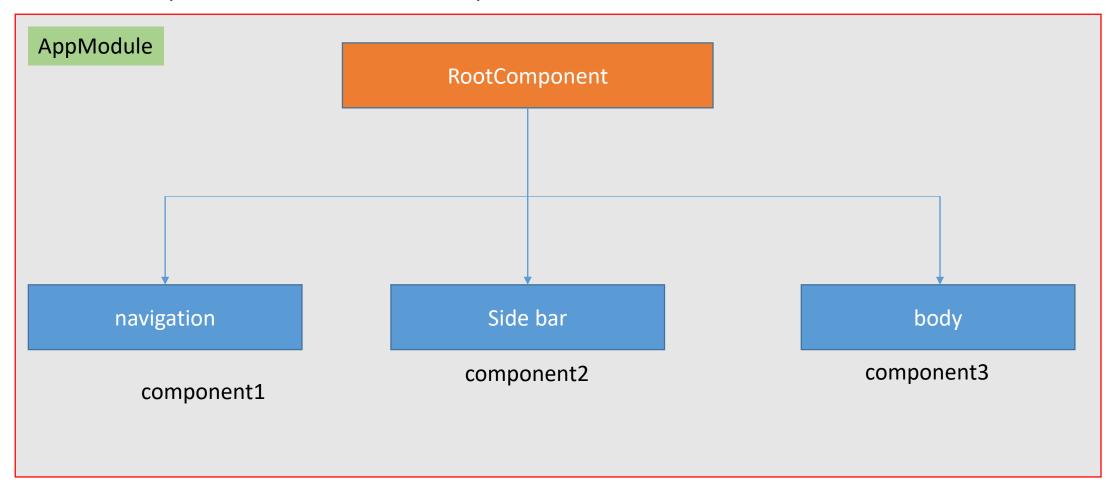
#### Components

- Controls the portion of view part
- One component generally controls a portion of view
- Every Angular application has at least one root component named AppComponent



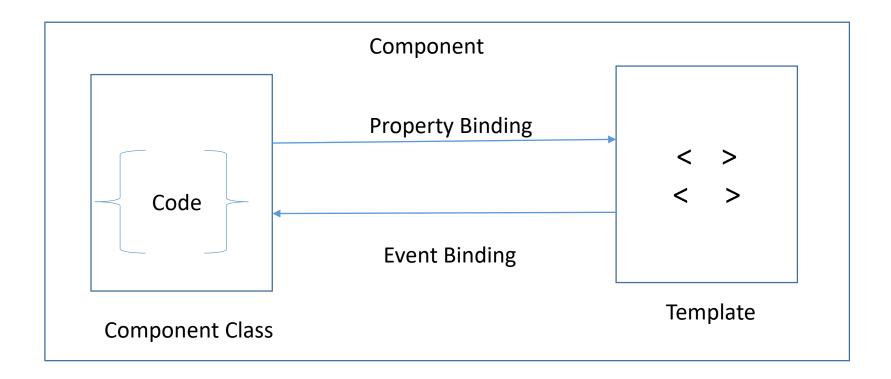
## Components

• Root Component will nest other components



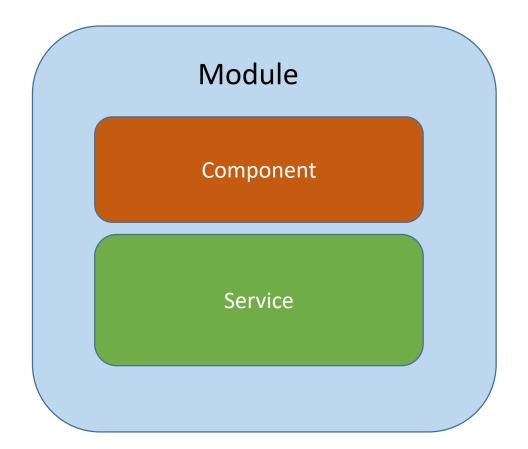
## Components

- Every Component has
  - HTML Template
  - Class (TypeScript)
    - The class handles the logic for managing view



#### Services

- Services are TypeScript Classes
- They handle business logic for the UI
- Reusable
- Used to make http call to remote servers
- Can be injected into a component class



## Summary

Angular App --- One or more angular modules

Module ---- One or more components and services

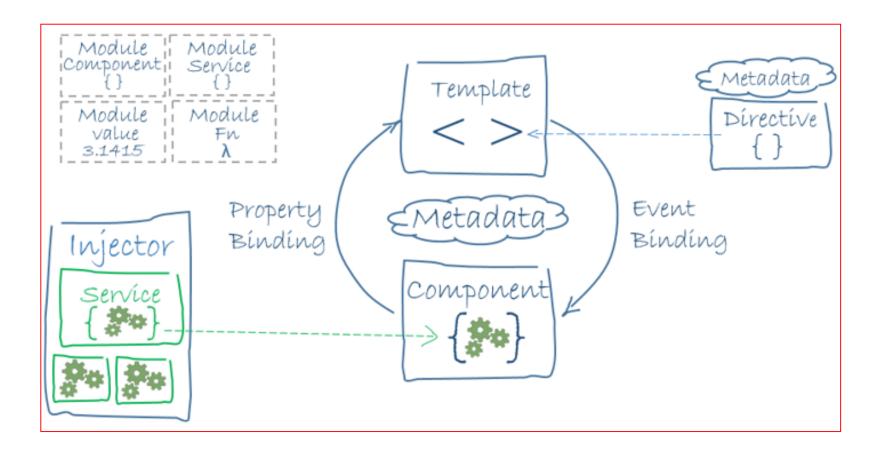


Image courtesy: http://angular.io