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UI Development - Angular
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=> Angular is UI framework

=> Angular is used to develop client side of the application

=> Angular framework developed using Typescript

=> Angular developed by Google

=> Angular is mainly used for single page application development.

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Angular Building Blocks
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- 1) Components
- 2) Templates
- 3) Data Binding
- 4) Directives
- 5) Pipes
- 6) Services
- 7) Dependency Injection

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=> Component represents small portion in web page

Ex: header component
 menu component
 body component
 sidebar component
 footer component etc...

Note: Every component will have its own template

=> Component & template relation will be represented using Metadata

=> Data binding is the process of sending data from component to template and vice versa.

Note: Angular supports two way data binding

component <-----> template

=> Service is a typescript class which contains business logic.

=> Directives are used to manipulate DOM elements in template.

Ex: if - else, loops etc...

=> Pipes are used to transform the data in template.

ex: lower case to upper case & INR to USD etc...

=> Dependency Injection means injecting one class obj into another class obj

Ex: Inject service obj into component

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Angular Setup
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Step-1 : Download and Install Node

URL : <https://nodejs.org/en/>

Note: After installation, verify node version

```
$ node -v
```

Step-2 : Install Type Script

```
$ npm install -g typescript
```

```
$ tsc -v
```

Step-3 : Install Angular CLI

```
$ npm install @angular/cli -g
$ ng v
```

Step-4 : Download and install VS Code IDE

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Angular Project Creation
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Step-1: Create Angular Application

```
$ ng new ecomm-ui
```

Step-2: Run Angular application

```
$ cd ecomm-ui
$ ng serve --open
```

Note: When we run angular app, by default app-component will be loaded.

Step-3: Install bootstrap

```
$ npm install bootstrap
```

Step-4: Configure bootstrap in angular.json file

```
"styles": [
  "node_modules/bootstrap/dist/css/bootstrap.min.css",
  "src/styles.css"
],
```

Step-5 : Stop and Run angular app

Step-6 : Update app-component template file

```
<div class="container">
  <h1>Angular UI App</h1>
</div>
```

Step-7: Create footer component

```
$ ng g c footer
```

-----Update footer-component template with below code -----

```
<div class="container-fluid p-1 bg-primary text-center text-white">
  <p>Ashok IT - All Rights Reserved</p>
</div>
```

Step-8: Access footer component from AppComponent template by using selector

```
<app-footer></app-footer>
```

Step-9: Create navbar component

```
$ ng g c navbar
```