Agenda for the Day

DevOps

CI (Continuous Integration)

CD (Continuous Delivery / Deployment)

Jenkins

Revisit of Week8

Angular – Is a OpenSource JS based Front End Framework for developing Rich UI applications using TypeScript. It’s Developed and maintained by Google.

TypeScript – Is a SuperSet of JavaScript. Developed & maintained by Microsoft.

Angular is a very popular Frontend based (MVVM) framework

MVVM – Model-View View-Model Framework

Angular is a Component based Architecture. Angular apps can be created using Angular CLI

CLI – Command Line Interface.

TypeScript – It’s typed superset/ strongly typed language that can be transpiled to javascript using typescript compiler.

TypeScript provides Object Oriented features, error handling, Strongly typing etc.,

Node – JS runtime (Which helps to run the JS code outside the browser)

NPM – Node Package Manager (It’s a package/dependency managing tool for Javascript based framework)

Angular applications can be created using Angular CLI.

Installing Angular CLI

1. Check node and npm version (node -v, npm -v)
2. Install angular CLI using “npm install -g @angular/cli”
3. ng version

To create a new angular application

1. ng new <app\_name>
2. cd <app\_name>
3. ng serve -o –port:4500

Angular applications will have a Root Module and a Root Container both are called as app-module and app-component respectively.

We can create Class/Interface/ Pipes using typescript

In Angular we can create Components, Services, Routes, modules, pipes etc.,

Ng generate [C] Component/ [S] Service/[R] Routes/ [P] Pipes/Modules etc.,

Ng g <component\_name>

Angular folder structure

1. package.json
2. angular.json
3. tsconfig.json
4. karma.config.js
5. package.lock.json
6. src 🡪 app 🡪 Angular modules, components, services, pipes
7. webpack – is the module bundler for JavaScript

Each component in angular may have minimum of 2 files or maximum of 4 files only.

Login.component.ts

Login.component.spec.ts

Login.component.html

Login.component.css

@Component/ @Service/ @Injectable --- These are all angular annotations

httpClients (To get the data from the Web/Micro Service) – All http based methods will be executed using httpClients

Types of binding in Angular

1. One way Binding (Interpolation, Attributes)
2. Two way Binding (Property Binding , Event Binding)

ng test (This is for unit testing the angular application.

ng e2e (This is for end to end testing / integration testing)

Jasmine, Karma & Protractor is the main testing tools for angular application.

DevOps == **DEV**elopment and **Op**eration**s**

**DevOps =** Set of Process and methodologies designed to combine the Development and Deployment. (Operations)

UAT = User Acceptance Testing

Jenkins is one of the best CI/CD Tool.