**Angular**

**Day 1**

1.Why Angular and its advantages over other framework

2. How does an Angular application work?

Introduction

Angular Features

•            Angular Improvements upto version 12

•            Angular CLI

•            Angular Common Topic

•            Angular Components and templates

•            Angular Lifecycle Hook

•            Basic, Common, Domain

•              Component Interaction  and Data Binding

•            DI, Directives

•            Lazy Loading , Lifecycle Hooks, Routing, Operator, Pipes, RxJS,

**Day 2**

•            Service

•            Structural directives

•            TypeScript, TypeScript Features

•            Unit Testing, Scenarios - Component, service, API call, Pipe, directives

•            Web workers

•              Differential loading

3.Advantages of Typescript over JavaScript

4.Building blocks of Angular

5.Default and custom Directives and pipes

6.Services and dependency Injection

7.Various Databinding techniques

**Day 3**

8.Data flow between related and independent components

9.Http Interceptors

10.Promises vs Observables

11.Life cycle hooks and their uses and implementation

12.Rxjs Library

**Day 4**

13. Routing Mechanism

14.Lazy Loading

15.Basic Authentication mechanism

16.New features added in html5, css3 and ES6 of Javascript

17. Angular security and best practices

**Java/Spring boot**

**Day 5**

1.New features introduced in java 8

Spring Boot Fundamentals

Collections

REST Fundamentals

Components of RESTful Web Services

Spring Boot CLI and Initializing a Spring Boot Project

Developing Web Applications using REST End Points with Spring Boot in Spring MVC

Externalized Configurations

Spring Boot Actuator

Testing the Spring Boot Project

Spring Boot Developer Tools

2.collections

3.Functional Interfaces and its advantages

4.SOLID Principles

5.OOPS concepts

**Day 6**

6.Default and custom Exception

7.Why Spring boot

8. Folder structure and data flow

9.Starter projects and dependencies

10.Various annotations

11. dependency injection and loose coupling

**Day 7**

12.ORM

13.defining entities for a problem statement

14.Relations (one to one, one to many, many to one, many to many)

15.comparator and comparable

16.common libraries like apache poi, aspos

17.spring security

18.basics in hibernate

**Day 8**

15.comparator and comparable

16.common libraries like apache poi, aspos

17.spring security

18.basics in hibernate

**Day 9**

Mini Project – Day 1

**Day 10**

Mini Project – Day 2 and submission