1. Creating and Communicating Between Components and write unit test cases for each

• Creating a Data-bound Component

• Communicating with Child Components

• Communicating with Parent Components

• Using Template Variables To Interact with Child Components

• Styling Components

2. Exploring the New Template Synatx

• Repeating Data with ngFor

• Using the Safe-Navigation Operator

• Hiding Elements with ngIf

• Hiding Elements with [Hidden]

• Hiding and Showing Elements with ngSwitch

• Adding style with ngclass

• Adding style with ngstyle

3. Creating Reuseable services and **write unit test cases for each**

• Creating and Injecting Services

4. Routing and Navigating Pages

• Creating a Route

• Using Route Parameters

• Linking to Routes

• Navigating from Code

• Preventing a Route from Activating

• Preventing a Route from De-Activating

• Pre-Loading Data for a Component

5. Manipulating Data with Pipes and **write unit test cases for each**

• Using the Lowercase Pipe

• Using the Date Pipe with Parameters

• Creating a Custom Pipe

• Using the ngOnChanges Lifecycle Hook

• Filtering Data

• Sorting Data

6. Understanding Dependency Injection

• Use Injection Token & @Inject()

• Use the @host and @Option

7. Creating Directive and Advanced Components

• Create a Directive

• Listen to Route Parameter Changes of a Parameterized Page

• Using @viewChild

8. Communicating with the Server using HTTP, Observables, and Rx and **write unit test cases for each**

• Use any Online API to Get sample data

• Making an HTTP Get Request

• Massaging Requested Data with Map

• Using ForkJoin Operator

**Also code coverage for unit tests should be above 80%**