**Node JS, Angular 2 and5 course contents**

**Day 1**

Introduction to NodeJS

* Installing NodeJS
* Working with CLI and Node REPL,
* Learning the Dynamics of Client and Server-side JavaScript, First Node.js Program.

TypeScript

* Learning the Different Types
* Understanding Interfaces
* Implementing Classes
* Class Inheritance
* Implementing Modules
* Understanding Functions

Getting Started with Angular

* Why Angular?
* Understanding Angular
* Modules
* Directives
* Data Binding
* Dependency Injection
* Services
* Separation of Responsibilities
* Adding Angular to Your Environment
* Creating a Basic Angular Application
* Creating Your First Angular App
* Understanding and Using NgModule
* Creating the Angular Bootstrapper

**Day 2**

Angular Components

* Component Configuration
* Defining a Selector
* Building a Template
* Using Inline CSS and HTML in Angular Applications
* Using Constructors
* Using External Templates
* Injecting Directives
* Building a Nested Component with Dependency Injection
* Passing in Data with Dependency Injection
* Creating an Angular Application that Uses Inputs

Expressions

* Using Expressions
* Using Basic Expressions
* Interacting with the Component Class in Expressions
* Using TypeScript in Angular Expressions
* Using Pipes
* Using Built-in Pipes
* Using Built-in Pipes
* Building a Custom Pipe
* Creating a Custom Pipe

Creating Your Own Custom Angular Services

* Integrating Custom Services into Angular Applications
* Adding an Angular Service to an Application
* Implementing a Simple Application that Uses a Constant Data Service
* Implementing a Variable Data Service
* Implementing a Service that Returns a Promise
* Implementing a Shared Service

**Day 3**

Data Binding

* Understanding Data Binding
* Interpolation
* Property Binding
* Attribute Binding
* Class Binding
* Style Binding
* Event Binding
* Two-Way Binding

Built-in Directives

* Understanding Directives
* Using Built-in Directives
* Components Directives
* Structural Directives
* Attribute Directives

**Day 4**

Custom Directives

* Creating a Custom Attribute Directive
* Creating a Custom Directive with a Component

Events and Change Detection

* Using Browser Events
* Emitting Custom Events
* Emitting a Custom Event to the Parent Component Hierarchy
* Handling Custom Events with a Listener
* Implementing Custom Events in Nested Components
* Deleting Data in a Parent Component from a Child Component
* Using Observables
* Creating an Observable Object
* Watching for Data Changes with Observables

**Day 5**

Build Web Applications using ExpressJS&MongoDB

* Introduction to ExpressJS,
* Installation and Configuration of a Express JS Project
* MongoDB
* DB communication
* MEAN stack

Implementing Angular Services in Web Applications

* Understanding Angular Services
* Using the Built-in Services
* Sending HTTP GET and PUT Requests with the http Service
* Configuring the HTTP Request
* Changing Views with the router Service
* Using routes in Angular
* Implementing a Simple Router
* Implementing a Router with a Navigation Bar
* Implementing a Router with Parameters
* Using the Angular CLI
* Generating Content with the CLI

Testing in Node.js

* Introduction to Jasmine

Unit Testing (Basics)

* Using Karma and Jasmine