

## HTML5 and CSS

### Front end

#### HTML Fundamentals

- Basic Tags
- New Tags in HTML5
- Local Storage
- Index DB
- CSS3 Fundamentals
- CSS3 New Properties
- CSS3 Animation
- CSS3 Tooltips

#### CSS Framework

- Bootstrap

### Java Script & JQuery

#### Introduction

- What is JavaScript? Complete Introduction with Hello World

#### JavaScript Concepts and Basics

Statements, JS Syntax , Comments ,Variables ,Operators, Arithmetic , Assignment, Data Types, Functions, Objects, Events, Strings, String Methods , Numbers ,Number Methods , Arrays, Array Methods ,Array Sort ,Array Iteration ,Dates ,Date Formats,Date Get Methods ,Date Set Methods ,Math ,Random, Booleans ,Comparisons ,Conditions ,Switch ,Loop For ,Loop While ,Break ,Type Conversion , Bitwise , RegExp , Errors, Scope , Hoisting ,Strict Mode ,this keyword ,Let , Const ,Debugging ,Style.

- Variable Naming Rules and JavaScript Data Types(With Example)
- Expressions and Operators
- Flow Control
- Defining Functions and Methods
- Constructors and Inheritance
- Pattern Matching with Regular Expressions
- Managing Web Page Styles using JavaScript and CSS
- Handling Web Page Events

#### JS Forms

- How to Script Forms
- Forms API

#### JS Objects

- Definitions
- Properties
- Methods
- Accessors
- Constructors
- Prototypes

## JS Functions

- Definitions
- Parameters
- Invocation
- Call
- Apply
- Closures

## JS HTML DOM

- Intro
- Methods
- Document
- Elements
- HTML
- CSS
- Animations
- Events
- Event Listener
- Navigation
- Nodes
- Collections
- Node Lists

## JS Browser BOM

- Window
- Screen
- Location
- History
- Navigator
- Popup Alert
- Timing
- Cookies

## JS JSON

- Intro
- Syntax

- Json vs XML
- Data Types
- Parse
- Stringify
- Objects
- Arrays
- PHP
- HTML
- JSONP

## JS vs jQuery

- jQuery Selectors
- jQuery HTML
- jQuery CSS
- jQuery DOM

## Ajax

- Introduction
- XMLHttpRequest
- Request
- Response
- XML File
- PHP
- ASP
- Database
- Applications
- Examples

## Angular 6 & 7

### Introduction

- What is Angular? Why Angular?
- Features of Angular
- Difference between Angular 2, 4, 5, 6, 7
- Required software/tools
- Initial setup
- Creating basic Angular application
- Angular application flow
- Brief description of modules and components

### Components in Angular

- Creating component using Angular CLI
- Using component selectors

- Lifecycle hooks
- OnInit, OnDestroy , etc as per requirement
- Component interaction
- Parent & child interaction

## Data & Event Binding

- One-way data binding
- Two-way data binding
- Event binding
- Examples in each section

## Pipes

- What are pipes?
- Inbuilt pipes
- Custom pipes
- Pure & impure pipes

## Directives

- What are directives?
- Types of directives
- Custom directives

## Structural Directives

- ngIf – syntax and examples
- ngFor – displaying data dynamically – examples
- ngSwitch – syntax and examples
- ng-container

## Attribute Directives

- ngClass – syntax and examples
- ngStyle – syntax and examples

## Template Driven Forms

- Introduction
- Basic form with input text field
- Validations – required, maxlength, etc
- Submitting form
- Disabling submit when form is invalid
- Additional input types
- Radio buttons
- Checkbox
- Select dropdown
- Date fields

## Reactive Forms

- Need of reactive forms
- When to use reactive and template driven forms
- Basic form with input text
- Form validation
- Additional input types
- Dynamic checkboxes
- Radio buttons
- Select dropdown

## Services & HTTP Client

- What is a Service?
- Creating a Basic Service
- What is Dependency Injection?
- Injecting Services
- Using a service in a Component
- Using a shared service
- Angular HTTP Client
- Observable
- Making a basic HTTP GET Call
- GET request
- GET request with parameters
- POST request
- Reading HTTP Response
- Using .map()
- catchError()
- Using the Service in a Component

## Routing

- Routing module
- Define routes and add router outlet
- Redirecting
- Lazy loading
- Route guards
- Query parameters

## Building & Deployment

- Build the project using 'ng build'
- Deploy the project

## Angular 7 Features

- Unit testing using Karma Essential
- Angular Material Essential