**Front -End Web Development Training Contents -20Days Theory and Practical**

|  |  |  |
| --- | --- | --- |
| SlNo | Technology | Duration [20 Days] aprox |
| 1 | HTML-5 CSS-3 | 5 Days |
| 2 | JavaScript-6 | 7 Days |
| 3 | TypeScript | 1 days |
| 4 | Angular 12 [stable V] | 7 days |

**HTML5/CSS3**

**Program Duration:** 5 days.

**Contents:**

* HTML Basics
  + Understand the structure of an HTML page.
  + Learn to apply physical/logical character effects.
  + Learn to manage document spacing.
* Tables
  + Understand the structure of an HTML table.
  + Learn to control table format like cell spanning, cell spacing, border
* List
  + Numbered List
  + Bulleted List
* Working with Links
  + Understand the working of hyperlinks in web pages.
  + Learn to create hyperlinks in web pages.
  + Add hyperlinks to list items and table contents.
* Image Handling
  + Understand the role of images in web pages
  + Learn to add images to web pages
  + Learn to use images as hyperlinks
* Frames
  + Understand the need for frames in web pages.
  + Learn to create and work with frames.
* HTML Forms for User Input
  + Understand the role of forms in web pages
  + Understand various HTML elements used in forms.
* New Form Elements
  + Understand the new HTML form elements such as date, number, range, email, search and datalist
  + Offerings of HTML5
  + HTML5 – Page Layout
  + HTML5: Browser Support
  + Enhanced Form Elements
  + Audio And Video
* HTML5 – Client-Side Storage
  + Introduction to HTML5 Client-Side Storage
  + Types of Client-Side Storage

CSS 3

* + Introduction css
  + CSS Syntax
  + Types of CSS
* Working with Text and Fonts
  + Text Formatting
  + Text Effects
  + Fonts
* CSS Selectors
  + Introduction to Selectors
  + Universal Selector
  + Type Selector
  + Class Selector
  + ID Selector
  + Attribute Selector
  + PseudoClasses
* Layout
  + Introduction
  + Positioning
  + Box Layout
  + Table Layout
  + Vendor Prefixes
  + Working with Columns
* Working with Colors
  + Background
  + Multiple Background
  + Colors
    - RGB and RGBA
    - HSL and HSLA
    - Alpha factor
    - Opacity & Transparency

**JavaScript ES6**

**Program Duration**: 7 days

* **Contents**: Introduction to JavaScript
  + Basic Concepts of JavaScript
  + Embedding JavaScript in HTML
* JavaScript Language
  + Data Types and Variables
  + JavaScript Operators
  + Control Structures and Loops
  + JavaScript Functions
* Working with Predefined Core Objects
  + Data Types in JavaScript
  + String Objects
  + URL String Encoding and Decoding
  + Math Properties & Objects
  + Date Objects
  + Date and Time
* Working with arrays
  + Arrays object, its properties and methods
* Working With Document Object
  + Document Object and its properties, methods and events
* Arrow functions
* Template Strings
* Timmer functions
* Working with Object Creation
  + Object Literals.
  + New operator or constructor.
  + Object.create method.
  + Class
* Rest and spred operators
* Array and Object destructuring
* Json create and Manupulate with rest Api

**Typescript**

**Program Duration**: 1 days.

**Contents:**

* Introduction to Typescript
* Introduction to Typescript
* JavaScript & Typescript
* The type system-Variable, Array
* Defining class and interface
* Defining a module
* Importing a module

**Angular 5**

**Program Duration:** 7 days

**Contents:**

* Introduction to Angular 12
* What is Angular 12?
* Scope and Goal of Angular 12
* Installing and using Angular 12
* Building Blocks of an Angular 12  Application
* Components
* What is a component?
* Developing a simple component.
* Templates for a component.
* Component lifecycle
* Data Binding
* What is data binding
* One way data binding
* Two way data binding
* Nested component
* Event binding
* Directives
* What are directives?
* Types of directives - component, structural and attribute
* Creating a basic directive
* Handling event & Binding input in attribute directive
* Creating your own structural directive
* Using the structural directive
* Binding input to a structural directive
* Working with Forms
* Forms in Angular 12
* Template Driven Form
* Model Driven Forms
* Reactive Forms Introduction
* More Form Controls
* Form Control Properties
* setValue and patchValue
* Validating Form Elements
* A Basic Angular Form
* Binding Input Fields
* Displaying Form Validation State & Field Validation State
* Displaying Validation State Using Classes
* Disabling Submit when Form is Invalid
* Service and Dependency Injection
* What is a service?
* Injecting a service to a component
* Application wide dependency injection
* @Injectable classes
* Multiple service instances
* HTTP Client
* The new HTTP providers
* Injecting the providers
* GET call
* Handling error
* About Observables
* POST request
* Working with headers
* Pipe
* What is a pipe?
* Passing parameters to a pipe
* Chaining pipes
* Developing a custom pipe
* Routing
* Why use routing?
* Defining a route table
* New Routing architecture Angular 5
* Navigation using hyperlink & code
* Supplying parameters to a route URL
* Creating Angular-CRUD Application with Web

Services