SYLLABUS – COMPLETE ANGULAR

PRE-REQUISITE / TARGET AUDIENCE: Any beginner who wants to build career as Web designer can take this course

SYLLABUS - HTML

MODULE 01: HTML INTRODUCTION

- ❖ Web Development Introduction
- ❖ History of HTML
- ❖ What you need to do to get going and make your first HTML page
- ❖ What are HTML Tags and Attributes?
- ❖ HTML Tag vs. Element
- ❖ HTML Attributes:
- ❖ How to differentiate HTML Document Versions
- ❖ Software Installations for course

MODULE 02: HTML-BASIC FORMATTING TAGS

- ❖ HTML Basic Tags
- ❖ HTML Formatting Tags
- ❖ HTML Colour Coding

MODULE 03: HTML GROUPING AND LISTS

- ❖ Div and Span Tags for Grouping
- ❖ Unordered Lists
- ❖ Ordered Lists

MODULE 04: HTML IMAGES AND LINKS

- ❖ Image and Image Mapping
- ❖ URL - Uniform Resource Locator
- ❖ URL Encoding

MODULE 05: HTML TABLE

- ❖ <table>
- ❖ <tbody>
- ❖ <thead>
- ❖ <col>
- ❖ <th>
- ❖ <tr>
- ❖ <td>

MODULE 06: HTML FORM

- ❖ input
- ❖ textarea
- ❖ button
- ❖ label
- ❖ drop-down
- ❖ checkboxes
- ❖ fieldset
- ❖ datalist
- ❖ radio button

HTML 5

- ❖ Video and Audio Support
- ❖ Header and Footer
- ❖ Navigation Links
- ❖ Form: HTML5 most used features
- ❖ HTML Graphics

SYLLABUS - CSS

MODULE 01: CSS INTRODUCTION

- ❖ Benefits of CSS
- ❖ CSS version History
- ❖ CSS Syntax
- ❖ External style sheet using <link>
- ❖ Multiple Style sheet
- ❖ Value Length and Percentage

MODULE 02: CSS SELECTORS

- ❖ ID selector
- ❖ Class selector
- ❖ Grouping selector
- ❖ Universal selectors
- ❖ Child selectors
- ❖ Attribute selectors

MODULE 03: COLOUR BACKGROUND CURSOR

- ❖ background-image
- ❖ background-repeat
- ❖ background-position
- ❖ CSS cursor

MODULE 04: TEXT FONTS

- ❖ color
- ❖ background-color
- ❖ text-align
- ❖ text-indent
- ❖ white-space
- ❖ letter-spacing
- ❖ word-spacing
- ❖ font-size
- ❖ font-style

MODULE 05: LISTS AND TABLES

- ❖ CSS List
  - o list-style-type
  - o list-style-position
  - o list-style-image
- ❖ CSS Table
  - o border
  - o width and height

o   text-align   o   color
o   padding

MODULE 06: BOX MODEL

❖   Borders and Outline

❖   Margin and Padding

❖   Height and Width

MODULE 07: DISPLAY POSITIONING

❖   CSS Visibility
❖   CSS Display
❖   CSS Scrollbars
❖   CSS Positioning
    o   Static positioning
    o   Fixed positioning
    o   Relative positioning
    o   Absolute positioning

SYLLABUS – JAVASCRIPT

MODULE 01: JS INTRODUCTION

❖   Java script Introduction
❖   Why JS
❖   Role of JS in web
❖   Benefits of JS

MODULE 02: VARIABLES AND OPERATORS

❖   Variable Declaration
❖   Variable Initialization
❖   Operators:
    o   Arithmetic,
    o   Comparison
    o   Logical or Relational
    o   Ternary or Conditional Operator
❖   Unary Operator vs Binary Operator
❖   Instanceof operator

MODULE 03: FUNCTIONS

❖   What is Function?
❖   Function with no argument
❖   Function with Argument
❖   Function with return value
❖   Optional Parameters in function

- ❖ Function Declaration
- ❖ Function Expression
- ❖ Anonymous Function
- ❖ Function as a value
- ❖ Callback function
- ❖ Built in Functions
- ❖ Standard Date and Time Functions

MODULE 04: DATA TYPES

- ❖ Primitive Types: Number, String, Boolean
- ❖ Weak type vs Strong type
- ❖ NaN
- ❖ Null vs undefined
- ❖ Union types

MODULE 05: VARIABLE'S

- ❖ Global variable
- ❖ Local variable
- ❖ Scope in JS
- ❖ Let vs const vs var

MODULE 06: CONTROL STATEMENTS

- ❖ Conditional Control Statements
  - o If-else Statement
  - o Switch case statement
  - o break and continue
- ❖ Looping Control Statements
  - o For loop
  - o While loop
  - o Do while loop

MODULE 07: CLASS AND OBJECT

- ❖ Object
- ❖ Different ways to create object
- ❖ Constructor function
- ❖ This keyword
- ❖ Prototype
- ❖ Class
- ❖ constructor

MODULE 08: ADVANCE STUFF

- ❖ Closure
- ❖ Map
- ❖ Set
- ❖ Arrays
- ❖ Promises

Module 09: Web Storage

- ❖ Local Storage
- ❖ Session Storage

Module 10: JSON

- ❖ JSON Introduction
- ❖ Syntax rules of JSON
- ❖ JSON Stringify

Module 10: HTML Form Manipulations

- ❖ HTML DOM - Document Object Model
- ❖ Working with HTML form and it's element

Syllabus – Angular

Module 01: Angular Installation

- ❖ node.js
- ❖ Angular-cli
- ❖ Visual Studio code
- ❖ History of Angular
- ❖ Benefits of Angular
- ❖ Major versions in Angular

Module 02: Project Creation

- ❖ Create First Project in Angular
- ❖ What is Ng
- ❖ Angular complete directory structure understanding
- ❖ Execution process flow start to end
- ❖ Different ways component creation

Module 03: Types of Data Bindings

- ❖ String interpolation
- ❖ Property Binding
- ❖ Event Binding
- ❖ Two-way Data Binding

module 04: Decorators

- ❖ @Component
- ❖ @NgModule
- ❖ @Injectable
- ❖ @Input
- ❖ @Output

❖ @HostListener
❖ @Directives
❖ @Pipes

MODULE 05: COMPONENT LIFE CYCLE HOOKS

❖ Complete understanding of component life cycle hooks

MODULE 06: PIPE IN ANGULAR

❖ Understanding Pipe concept: Why and How to use it?
❖ Different types of pipe
  o Predefined pipes in angular
  o Custom Pipe

MODULE 07: DIRECTIVES IN ANGULAR

❖ Understanding Directives concept
❖ Why and How to use directives?
❖ Types of directives
  o Structural directives
  o Attribute directives
  o Custom directives

MODULE 08: DEPENDENCY INJECTION AND SERVICES

❖ What is services in angular?
❖ How to use services?
❖ How to create service?
❖ Dependency Injection in Angular

MODULE 09: CRUD APP

❖ HTTP Client Module and Basic Database operations like
  o Insert
  o Fetch
  o Update
  o Delete

MODULE 10: BOOTSTRAP CSS FRAMEWORK

❖ Bootstrap overview
❖ How to integrate bootstrap in angular
❖ Font-awesome library
❖ Bootstrap alternative – Angular Material

MODULE 11: FORMS

❖ What is Forms in Angular?
❖ Types of Form
  o Template Driven form

o   Reactive Form

MODULE 12: ROUTINGS

❖ What is Routing and How to use it?
❖ Benefits of Routing

MODULE 13: ASSESSMENT TEST

MODULE 14: PROJECT

❖ Go live Project

SYLLABUS – GIT

MODULE 01: INTRODUCTION

❖ Source Control Management overview
❖ Why SCM tool required
❖ SVN vs GIT

MODULE 02: CLONING AND CREATING PROJECT

❖ Cloning - code base
❖ Init – create project
❖ States of GIT
    o   Working directory
    o   Staging area
    o   Repository

MODULE 03: BASIC SNAPSHOTTING

❖ Staging file
❖ Status
❖ Commit
❖ Diff
❖ Reset

MODULE 04: GENERAL CONCEPTS

❖ Local repository
❖ Remote repository
❖ What is upstream and downstream?

MODULE 05: BRANCHING AND MERGING

- ❖ Branch
- ❖ Checkout
- ❖ Merge
- ❖ Rebase
- ❖ Log
- ❖ Stashing changes

MODULE 06: SHARING AND UPDATING PROJECTS

- ❖ Fetch
- ❖ Pull
- ❖ Push

MODULE 07: PATCHING

- ❖ cherry pick
- ❖ rebase
- ❖ revert
- ❖ Stash