

SYLLABUS – COMPLETE REACTJS

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> | ❖ <th> |
| ❖ <tbody> | ❖ <tr> |
| ❖ <thead> | ❖ <td> |
| ❖ <col> | |

MODULE 06: HTML FORM

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

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 | ❖ Universal selectors |
| ❖ Class selector | ❖ Child selectors |
| ❖ Grouping selector | ❖ Attribute selectors |

MODULE 03: COLOUR BACKGROUND CURSOR

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

MODULE 04: TEXT FONTS

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

MODULE 05: LISTS AND TABLES

- | | |
|---|--|
| ❖ CSS List <ul style="list-style-type: none"> ○ list-style-type ○ list-style-position ○ list-style-image | ❖ CSS Table <ul style="list-style-type: none"> ○ border ○ width and height |
|---|--|

- text-align
- padding
- color

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
 - Static positioning
 - Fixed positioning
 - Relative positioning
 - 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:
 - Arithmetic,
 - Comparison
 - Logical or Relational
 - 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
 - If-else Statement
 - Switch case statement
 - break and continue
- ❖ Looping Control Statements
 - For loop
 - While loop
 - 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 | ❖ Arrays |
| ❖ Map | ❖ Promises |
| ❖ Set | |
-

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 – REACTJS

MODULE 01: WELCOME TO FRONT-END WEB DEVELOPMENT WITH REACT

- ❖ Full-Stack Web Development: The Big Picture
- ❖ Introduction to React
- ❖ Front-end JavaScript Frameworks and Libraries Overview
- ❖ React App Overview
- ❖ Introduction to JSX
- ❖ Configuring your React Application
- ❖ Creating First app in React
- ❖ React Components: State and Props
- ❖ Lifecycle Methods introduction

MODULE 02: REACT ROUTER AND SINGLE PAGE APPLICATIONS

- ❖ React Component Types
- ❖ Lifecycle Methods in detail
- ❖ React Router and parameters
- ❖ Single Page Applications(SPA)
- ❖ UI Design and Prototyping
- ❖ State management in React

MODULE 03: REACT FORMS, FLOW ARCHITECTURE AND INTRODUCTION TO REDUX

- ❖ Controlled and uncontrolled form
- ❖ In world of Redux
- ❖ React Redux Form and validations

MODULE 04: REDUX STATE MANAGEMENT

- ❖ Redux Actions
- ❖ Redux Thunk
- ❖ Client-Server Communication
- ❖ API integration
- ❖ React Animations (Optional)

MODULE 05: ASSESSMENT TEST

MODULE 06: 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
 - Working directory
 - Staging area
 - 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

MODULE 06: SHARING AND UPDATING PROJECTS

- ❖ Fetch
- ❖ Pull
- ❖ Push