

FrontEnd Web Development

HTML, CSS, JAVASCRIPT AND TYPESCRIPT

HTML Document Markup

- HTML Document Anatomy
- HTML Semantics and Document Hierarchy
- HTML References and Embedded Resources
- HTML Forms Topic

CSS Content Styling

- CSS Basics
- CSS Selectors and Style Application
- CSS Styling
- CSS Box Model and Layout

Advanced JavaScript: Objects and Functions

- Object: Inheritance and the Prototype Chain o Creating Objects: Function Constructors
- The Prototype Chain in the Console
- Creating Objects: Object. Create
- Primitives vs. Objects
- First Class Functions: Passing Functions as Arguments
- First Class Functions: Functions Returning Functions
- Immediately Invoked Function Expressions (IIFE)

Asynchronous JavaScript: Promises, Async/Await, and AJAX

- An Example of Asynchronous JavaScript
- Asynchronous JavaScript: The Event Loop
- Asynchronous JavaScript with Callbacks
- From Callback Hell to Promises
- From Promises to Async/Await
- AJAX and APIs

Making AJAX Calls with Fetch and Promises

JavaScript ES6

Variable Declarations with LET and CONST o Strings in ES6
Arrow Functions
Destructuring Arrays in ES6
The Spread Operator o Rest Parameters
Default Parameters
Classes

TypeScript

What is typescript?
Typescript installation
TypeScript vs. JavaScript o OOPs in TypeScript
Creating Classes and class properties
Methods Access Modifiers
Constructor Getters and Setters
Static properties and methods Inheritance Interfaces

React with Typescript

- **Getting started with React and typescript**
 - o Creating a React and Typescript Project
 - o Creating a class component
 - o Handling class component Event
 - o Class component States
 - o Class Component Lifecycle methods
 - o Creating a function component
- **Routing with React Router**
 - o Installing React router with routing
 - o Declaring routes
 - o Creating navigation
 - o Route Parameters

- o Handling Not found routes
- o Implementing Page redirects
- o Query Parameter o Router Prompts
- o Nested Routes o Lazy loading routes

- **Advance Types**

- o Union Types
- o Type Guards
- o Generics

- **Common Pattern**

- o Container and presentational components
- o Compound components
- o Render props pattern
- o Higher-order components

- **Working with Forms**

- o Creating a form with control component
- o Reducing boilerplate code with generic components
- o Validating forms o Form submission

- **React Redux**

- o Principles and Key concepts
- o Installing Redux
- o Creating actions
- o Creating a store
- o Connect our react app to the store
- o Managing state with useReducer

- **Interacting with RESTful APIs**

- o Writing asynchronous code
- o Using fetch
- o Using axios with class component
- o Using axios with function component