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

<u>React with Typescript</u>

• 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