(EDGE), ICT Division
Front end Development with ReactJS Syllabus

Course Introductions

Introduction to HTML

       HTML Intro With All Versions
       HTML Syntax/Structure
       HTML heading Tags, formatting Tags, Attributes, elements and nested elements
       Semantics and non-semantics elements
       Table
       Form
       Media tag - Audio Video Iframe
       Lists (ordered lists, unordered lists, and description lists)
       Image, Picture
       HTML Layout Design

Introduction To CSS

       Types Of CSS And Integration With HTML
       CSS Selector and Syntax
       Typography (Color, Text, Font, Text, Shadow, Icon)
       CSS Display Property
       CSS Box Model
       CSS Display, Flexbox, and Float
       CSS Position
       CSS Overflow
       CSS Font Integrations
       CSS Gradients
       CSS Keyframe
       CSS Transformations and Transitions
       Template Design Using HTML and CSS
       Responsive Template Design using media query

Introduction To Bootstrap

Bootstrap Integrations and Implementations
Bootstrap Grid & Layout
Bootstrap Button, Images, and forms
Bootstrap color and typography
Usage of Bootstrap Components
Bootstrap Responsive Navbar
Bootstrap Carousel and Slider
Bootstrap Modal
Bootstrap Accordion

Introduction To Tailwind

Installation and Usage

Introduction To Photoshop, Figma, Canva

Photoshop Installations and Introductions
PSD To Web conversion (using HTML, CSS, JS, Bootstrap)
How to use Figma
Figma To Web conversion (using HTML, CSS, JS, Bootstrap)
How to use Canva for necessary editing.

Introduce to JavaScript

Variables and Data Types
Functions
Conditionals (if-else statements, switch)
Loops (for loops, do while loops and while loops)
Arrays
Objects
JavaScript DOM Manipulation
Events and Event Handling
Callbacks
Asynchronous Programming
Promises
ES6+ Features (e.g., arrow functions, template literals, destructuring, map, foreach, and spread syntax)
Scope (global and local)
Closures
Error Handling (try-catch)

JSON (JavaScript Object Notation)
Fetch API
setInterval and setTimeout
Age Calculator
Calculator App
TODO App
Weather App Using Fetch API
JavaScript Dom, Event, nodelist, Append

Introduction to React.js

What is React.js?
Why use React.js?
Key Features of React.js
Setting Up Your Development Environment
Installing Node.js and npm
Create React App
Project Structure

Hello World in React

Creating a Simple React Component
Rendering the Component
JSX Syntax

Working with JSX

Understanding JSX
JSX Expressions
Conditional Rendering
Lists and Keys
Handling Events
Event Handling in React
Event Object
State Updates and Event Handlers

Components in React

Functional Components
Class Components
State and Props

Working with Forms

Controlled vs. Uncontrolled Components
Form Handling in React
Form Validation

Component Lifecycle

Mounting, Updating, and Unmounting
componentDidMount, componentDidUpdate, and componentWillUnmount

State Management

Managing Component State
useState Hook
Context API for Global State

React Router

Setting up React Router
Creating Routes
Navigation
Nested routes

Styling in React

CSS Modules
Styled-components
Inline Styling

Fetching Data

Making API Requests with Axios or Fetch
useEffect Hook
Loading and Error Handling

Building a Complete Application

Building a To-Do List App
Building a Weather App
Integrating State Management
Routing for Multiple Pages

Deployment

Building for Production
Deploying to Hosting Platforms (e.g., Netlify, Vercel)
Best Practices and Tips
Code Organization
Performance Optimization
Debugging React Apps

Introduction To Marketplace:

Fiverr Marketplace
Upwork
Freelancer
ThemeForest