



Frontend Web Development

HTML

- INTRODUCTION

- ◆ Parts of an HTML Document
- ◆ Version Information
- ◆ Head Section
- ◆ Meta Information
- ◆ Favicons
- ◆ Body Section
- ◆ List
- ◆ Table
- ◆ HTML Forms
- ◆ Anchors and Images
- ◆ Video, Audio

- ADVANCE HTML

- ◆ Introduction
- ◆ HTML5 History
- ◆ New Features and Groups
- ◆ Structure of HTML5 Document
- ◆ Power of HTML5 and Features
- ◆ Semantics and Block
- ◆ Level Elements
- ◆ HTML5 Forms
- ◆ HTML5 Multimedia

- HTML5 Graphics

CSS

- CORE CSS

- ◆ Introduction
- ◆ CSS Basics
- ◆ CSS Syntax
- ◆ CSS Versions
- ◆ CSS Id and Class
- ◆ CSS Styling

- ◆ Styling Backgrounds
- ◆ Styling Text
- ◆ Styling Fonts
- ◆ CSS Borders
- ADVANCE CSS
 - ◆ Introduction
 - ◆ CSS3 Modules
 - ◆ Position
 - ◆ Box Model
 - ◆ Background and Borders
 - ◆ Text Effects
 - ◆ 2D/3D Transformations
 - ◆ Multiple-Column Layout
 - ◆ Flex Grid
- User Interface

JavaScript

- Introduction to JavaScript
 - ◆ Syntax, Statements, Comments.
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- Enabling in various browsers Popup Boxes
 - ◆ Alert, Confirm, Prompt
- Java Script (JS Basics)
 - ◆ keywords
 - ◆ identifiers
 - ◆ datatypes
 - ◆ variables and constants
 - ◆ token
- Variables Operators
 - ◆ Arithmetic
 - ◆ Assignment
 - ◆ Comparison
 - ◆ Logical
 - ◆ Conditional
- Conditional Statements
 - ◆ If
 - ◆ If...else
 - ◆ If...else If...else
 - ◆ Switch
- Loops
 - ◆ While
 - ◆ Do...while
 - ◆ For
 - ◆ For...in Statement

- ◆ Break
- ◆ Continue
- **Function**
 - ◆ Creating tuple
 - ◆ function declarations, definitions and calling
 - ◆ types of functions
 - ◆ anonymous functions
 - ◆ flat arrow functions or arrow functions
 - ◆ self invoked function (IIFE)
 - ◆ storage classification or variable scope (var let const and without keywords)
 - ◆ recursion
 - ◆ scope chain rule and lexical scoping
 - ◆ closure
- **Objects**
 - ◆ literal and keys
 - ◆ object functions
 - ◆ nested objects
 - ◆ Object Prototypes
 - ◆ setter and getter methods
- **Set and Map Weak Map and weak Set**
- **Dates and Time**
- **OOPS**
 - ◆ literal and keys
 - ◆ object functions
 - ◆ nested objects
 - ◆ Object Prototypes
 - ◆ setter and getter methods
- **DOM Manipulation**
 - ◆ DOM HTML
 - ◆ DOM CSS
 - ◆ event handling
 - ◆ time based events
- **Events**
 - ◆ Introduction
 - ◆ Mouse Events
 - ◆ Keyboard Events
 - ◆ Form Events
 - ◆ Document/Window Events
- **Page redirection Built-in Objects**
 - ◆ Introduction
 - ◆ Number
 - ◆ Strings
 - ◆ Arrays
 - ◆ Associative Array
 - ◆ Array Properties and Methods
 - ◆ Date

- ◆ Boolean
- ◆ RegEx
- **Advanced JavaScript**
 - ◆ Form Validations
 - ◆ Basics of Form Validation
 - ◆ Validating Radio Buttons
 - ◆ Validating Check boxes
 - ◆ Validating Select Menus
 - ◆ Validating Text areas
 - ◆ strict mode
 - ◆ closure
 - ◆ synchronous and asynchronous programming
- **JS Browser Object Model (BOM)**
 - ◆ JS Cookies
 - ◆ JS Window
 - ◆ JS Location
 - ◆ JS Popups
- **Event propagation**
 - ◆ bubbling
 - ◆ capturing
- **Data fetching**
 - ◆ AJAX and JSON
 - ◆ Calling API using AJAX
 - ◆ Callbacks
 - ◆ Promise
 - ◆ fetch
 - ◆ async await

NAV BHARAT
COMPUTER EDUCATION

ReactJS

- **Typescript**
 - ◆ Why Typescript
 - ◆ Basic Types
 - ◆ Class and Interfaces
 - ◆ Modules
- **INTRODUCTION TO REACTJS**
 - ◆ What is ReactJS?
 - ◆ What is SPA?
 - ◆ DOM vs Virtual DOM
 - ◆ Advantages & Disadvantages
 - ◆ Key Features
- **ENVIRONMENTAL SETUP**
 - ◆ Node | NPM
 - ◆ Installation of CLI
 - ◆ Setup Project
 - ◆ Directory Structure

- ◆ Code Editors
- ◆ How ReactJS Application Boot
- **BASIC FEATURES OF REACTJS**
 - ◆ React Concepts
 - ◆ JSX and TSX
 - ◆ Render Elements
 - ◆ Function and Class Components
 - ◆ Props and State
- **Handling Events**
 - ◆ Dynamic Data Rendering
 - ◆ Property Binding
- **KEY FEATURES OF REACTJS**
 - ◆ Conditional Rendering
 - ◆ List and Keys
 - ◆ Forms Handling
 - ◆ Forms Validations
- **COMPONENT LIFE CYCLE HOOK**
 - ◆ Understanding component life cycle
 - ◆ All Life cycle Hooks
- **EVENT HANDLING REACT**
 - ◆ Understanding React Event System
 - ◆ Passing arguments to event Handlers
- **NETWORK CALL**
 - ◆ Fetch
 - ◆ Axios
- **CUSTOM SERVICES**
 - ◆ Introduction to Services
 - ◆ Building a Service
- **LOCAL DATA STORAGE**
 - ◆ Local Storage
 - ◆ Session Storage
 - ◆ Cookies
- **ROUTING WITH REACT ROUTER**
 - ◆ Setting up React Router
 - ◆ Configuring route with Route Component
 - ◆ Making routes dynamic with Route Params
 - ◆ Working with nested routes
 - ◆ Link and NavLink
 - ◆ Redirect Routes
- **UI COMPONENTS**
 - ◆ Material Design
 - ◆ PrimeNG
- **INTRODUCTION TO REDUX**
 - ◆ Why Redux
 - ◆ Install and setup
 - ◆ Store

- ◆ Reducer
- ◆ actions
- ◆ Dispatcher
- ◆ High order Components
- ◆ map State To Props and map Dispatch To Props usage
- **ADVANCE REDUX**
 - ◆ Async Actions
 - ◆ Middleware
 - ◆ Redux Thunk and Redux Saga
- **REACT HOOKS**
 - ◆ Why We Need HOOKS.
 - ◆ Different Types Of Hooks
 - ◆ Using State And Effect Hooks
 - ◆ Usereducer , Useref Etc.
 - ◆ Custom Hooks
 - ◆ Rules Of Hooks
- **THIRD PARTY MODULES**
 - ◆ Social Login
 - ◆ Pagination
 - ◆ Search
 - ◆ Filter
 - ◆ JWT Token
 - ◆ File Upload
 - ◆ Many More
- **REACTJS TESTING**
 - ◆ Jest with Enzyme
- **Develop a CRUD Application in REACTJS**
- **REACTJS Application Deployment**
 - ◆ Build Application and Deployment

Photoshop

- Introduction
- Introduction to Adobe Photoshop
- Color mode & resolution
- Types of Graphics
- Export image
- Animated Image
- Tools
- Ruler and scaling
- Create Logos
- Photos masking
- Smart Objects

- Merge Layers
- Group Layers
- Layer Styles
- Blending Options
- View Menu / Window Menu
- Filter Effects
- Image Adjustments
- Realtime Website Layout Design

DREAMWEAVER

- Dreamweaver CC Interface
 - ◆ The document toolbar
 - ◆ The property inspector
 - ◆ Dockable floating panels
 - ◆ Using contextual menus
 - ◆ Site Control
 - ◆ Defining a site
 - ◆ File and folder management
 - ◆ Creating site maps
 - ◆ Using the file browser
 - ◆ Basics
- Defining the site
 - ◆ Creating and saving document
 - ◆ Inserting images with assets panel
 - ◆ Adding text
 - ◆ Aligning page elements
 - ◆ Modifying page properties
 - ◆ Creating links with text and images
 - ◆ Preview in browser
- Linking
 - ◆ Link with point to file
 - ◆ Linking to new source files
 - ◆ Browse for file and link history

- ◆ Anchor links
- ◆ Email links
- ◆ File links
- ◆ Image maps
- Typography
 - ◆ About Typography
 - ◆ Web Typography
- Tables
 - ◆ Insert and modify a table
 - ◆ Fixed width tables
 - ◆ Relative width tables
 - ◆ Hybrid table
 - ◆ Insert tabular data
 - ◆ Sort table data
- Rollovers
 - ◆ Simple rollovers - insert rollover
 - ◆ Simple rollover - swap image behavior
 - ◆ Multiple-event rollovers
 - ◆ Flash buttons
- Cascading Style Sheets
 - ◆ Redefining HTML tags
 - ◆ Defining a custom class
 - ◆ CSS selectors to group tags
 - ◆ Linking to external CSS
 - ◆ CSS reference panel
- Forms
 - ◆ Form objects
 - ◆ Creating a form
 - ◆ Creating a jump menu
- Behaviors
 - ◆ Set text of status bar
 - ◆ Open browser window behavior
- Inserting Media Objects
 - ◆ Linking to sounds

- ◆ Embedding sounds
- ◆ Inserting flash
- ◆ Content inserting director content

JQUERY

- Introduction to OOP concept JQuery

- ◆ What is JQuery?
- ◆ Overview of JQuery features
- ◆ Using JQuery links
- ◆ JQuery Selectors
- ◆ JQuery Events
- ◆ JQuery Effect
- ◆ Hide() & show()
- ◆ Fade()
- ◆ Slide()
- ◆ Animate()
- ◆ Callback function
- ◆ Chaining
- ◆ JQuery HTML

- Get() & Set()

- ◆ Add() & Remove()
- ◆ CSS()
- ◆ Dimensions()

- JQuery Traversing

- ◆ Parent() & children()
- ◆ Next() & Prev()
- ◆ Find()
- ◆ JQuery AJAX
- ◆ Image slider using JQuery
- ◆ Form Validation
- ◆ Plugins

BOOTSTRAP

- **Bootstrap Framework**
 - ◆ Getting started with Bootstrap
 - ◆ Grid system in Bootstrap
 - ◆ Adding Header & Navigation
 - ◆ Adding Logo in Navigation Bar
 - ◆ Adding Banner
 - ◆ Adding Rows, Columns & Containers
 - ◆ Adding Column Width using offset
 - ◆ Ordering Columns using push or pull
 - ◆ Nesting Columns in Bootstrap
 - ◆ Adding Footer top Website
 - ◆ Typography in Bootstrap
 - ◆ Adding glyphsicons
 - ◆ Styling Tables
 - ◆ Adding Responsive or Utilities in Bootstrap
 - ◆ Styling Button using between classes
 - ◆ Styling Images and making images Responsive
 - ◆ Adding description list in bootstrap
 - ◆ Adding Panels
- **Live Website Design Project (100% Realtime Project)**
 - ◆ Designing a Professional Photoshop Template
 - ◆ Conversion of PSD to HTML
 - ◆ Adding the Contact Form
- **Form validations using JS**