

Front-End Development Course

By - D>S>S

About Course :-

This 2-month course covers HTML, CSS, and JavaScript, enabling students to build web pages, style them, add interactivity, and create responsive designs. They'll develop fundamental web development skills.

Course Outcomes :-

Here are the outcomes of the above course

- **1. HTML Skills:** Students will learn how to create web pages, structure content, add links, images, and forms to web pages.
- **2. CSS Skills:** They'll be able to make web pages look good by styling them with colors, fonts, and layouts.
- **3. JavaScript Skills:** Students will understand how to make web pages interactive, with features like buttons, forms, and dynamic content.
- **4. Responsive Design:** They'll learn how to make websites that work well on both big screens and small devices like phones and tablets.
- **5. Basic Web Development:** Students will have a good foundation in web development, knowing how to build and design basic websites.

Teaching Pattern :

Introduction to HTML

Day 1: Introduction to Web Development

Theory: What is HTML?

Practical: Setting up a basic HTML document

Day 2: HTML Document Structure

Theory: HTML Document Structure

Practical: Creating headings, paragraphs, and line breaks

Day 3: HTML Lists

Theory: Ordered and Unordered Lists

Practical: Creating lists in HTML

Day 4: HTML Links

Theory: Hyperlinks and anchors

Practical: Creating links and linking to external websites

Day 5: HTML Images

Theory: Inserting images

Practical: Adding images to your web page

HTML Forms and Tables

Day 6: HTML Forms (Part 1)

Theory: Form elements and input types

Practical: Creating basic forms

Day 7: HTML Forms (Part 2)

Theory: Form validation and submission

Practical: Adding form validation

Day 8: HTML Tables (Part 1)

Theory: Creating tables

Practical: Building simple tables

Day 9: HTML Tables (Part 2)

Theory: Table structure and styling

Practical: Enhancing tables with CSS

Day 10: Project: Create a basic webpage

Apply the knowledge gained so far to create a simple web-page

CSS Basics

Day 11: Introduction to CSS

Theory: What is CSS?

Practical: Inline and internal CSS

Day 12: CSS Selectors

Theory: Selecting HTML elements with CSS

Practical: Applying styles using selectors

Day 13: CSS Box Model

Theory: Understanding the box model

Practical: Manipulating the box model

Day 14: CSS Layout (Part 1)

Theory: CSS positioning

Practical: Working with positioning properties

Day 15: CSS Layout (Part 2)

Theory: CSS floats and flexbox

Practical: Creating layouts with floats and flex box

CSS Advanced and Responsive Design

Day 16: CSS Transitions and Animations

Theory: Adding motion to elements

Practical: Implementing transitions and animations

Day 17: CSS Typography

Theory: Styling text with CSS

Practical: Customizing fonts and text styles

Day 18: CSS Flexbox and Grid

Theory: Advanced layout techniques

Practical: Building responsive layouts

Day 19: Responsive Web Design

Theory: Making websites responsive

Practical: Creating a responsive webpage

Day 20: Project: Build a responsive web page

JavaScript

Introduction to JavaScript

Day 21: Introduction to JavaScript

Theory: What is JavaScript?

Practical: Writing your first JavaScript code

Day 22: JavaScript Variables and Data Types

Theory: Variables and data types

Practical: Working with variables

Day 23: JavaScript Operators and Control Structures

Theory: Operators, conditions, and loops

Practical: Implementing control structures

Day 24: JavaScript Functions

Theory: Defining and calling functions

Practical: Creating and using functions

Day 25: JavaScript Events

Theory: Handling events in JavaScript

Practical: Adding interactivity to web pages

JavaScript DOM Manipulation

Day 26: The Document Object Model (DOM)

Theory: Understanding the DOM

Practical: Accessing and modifying the DOM

Day 27: JavaScript Events (Advanced)

Theory: Event delegation and event listeners

Practical: Implementing advanced event handling

Day 28: JavaScript Forms and Validation

Theory: Working with forms and validation

Practical: Form validation with JavaScript

Day 29: JavaScript Libraries and Frameworks (Optional)

Theory: Introduction to libraries like jQuery

Practical: Using jQuery for DOM manipulation

Day 30: Project: Create an interactive webpage

Apply JavaScript knowledge to create a dynamic webpage

Advanced JavaScript

Day 31: Asynchronous JavaScript (AJAX)

Theory: Introduction to AJAX

Practical: Fetching data asynchronously

Day 32: JavaScript Promises

Theory: Handling asynchronous operations with promises

Practical: Implementing promises

Day 33: Introduction to ES6 (Modern JavaScript)

Theory: ES6 features and improvements

Practical: Using ES6 syntax in your code

Day 34: Local Storage and Cookies

Theory: Storing data on the client side
Practical: Working with local storage and cookies

Day 35: Project: Build an AJAX-driven application
Create a web app that fetches and displays data from an API

Final Projects and Recap

Day 36-40: Work on Personal Projects
Allow students to work on their own projects, applying HTML, CSS, and JavaScript knowledge.

Day 41: Final Project Presentation and Review
Have students present their projects and review key concepts.

Day 42: Course Review and Q&A
Recap the course, answer questions, and provide additional resources.

Signature of head of Civil
Department
