



TECHNOCATION FREELANCING TRAINING INSTITUTE & SOFTWARE HOUSE

Professional HTML5 & CSS3 Course Outline

Module 1: Introduction to HTML5 & CSS3

- Overview of Web Development & Internet Basics
 - What is HTML5 & Why It Matters?
 - Understanding CSS3 for Styling Web Pages
 - Setting Up a Development Environment (VS Code, Chrome DevTools)
 - Writing Your First HTML & CSS Code
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Module 2: HTML5 Fundamentals

- HTML5 Document Structure (<!DOCTYPE html>, <html>, <head>, <body>)
 - Essential HTML Elements (<p>, <h1> to <h6>, <div>, , <a>,)
 - Lists (, , <dl>) & Tables (<table>, <tr>, <td>, <th>)
 - HTML5 Forms (<input>, <textarea>, <select>, <button>)
 - Semantic Elements (<header>, <section>, <article>, <footer>)
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Module 3: CSS3 Basics & Styling Techniques

- Understanding CSS Selectors (Class, ID, Element, Grouping)
 - CSS Box Model (Margin, Padding, Border, Content)
 - Colors & Backgrounds (RGBA, Gradients, Opacity)
 - Text Styling & Typography (Fonts, Sizes, Weights, Line-Height)
 - CSS Display & Positioning (Static, Relative, Absolute, Fixed, Sticky)
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Module 4: Advanced CSS3 & Layout Techniques

- CSS Flexbox for Responsive Layouts
 - CSS Grid for Advanced Web Layouts
 - Media Queries & Responsive Design
 - CSS Animations & Transitions
 - CSS Variables & Custom Properties
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Module 5: HTML5 Multimedia & Forms

- Adding Audio & Video (<audio>, <video>)
 - Using the <canvas> Element for Graphics
 - Advanced Form Elements (Date Picker, Range, Color Picker)
 - Form Validation with HTML5 & CSS3
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Module 6: Responsive Web Design (RWD)

- Mobile-First Approach
 - Understanding Breakpoints & Media Queries
 - Creating Responsive Navigation Menus
 - Implementing Fluid & Adaptive Images
 - Optimizing Websites for Different Devices
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Module 7: CSS Frameworks & Preprocessors

- Introduction to CSS Frameworks (Bootstrap, Tailwind CSS)
 - Using Sass for CSS Preprocessing
 - Creating Custom CSS Variables & Mixins
 - Optimizing & Minifying CSS for Faster Loading
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Module 8: Advanced HTML5 APIs

- Geolocation API
- Web Storage (LocalStorage, sessionStorage)
- Drag & Drop API
- WebSockets for Real-Time Communication

- Working with JSON Data in HTML5
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Module 9: Project-Based Learning & Real-World Applications

- Developing a Responsive Landing Page
 - Creating a Personal Portfolio Website
 - Designing a Blog or News Website
 - Building an E-commerce Frontend
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Module 10: Deployment & Optimization

- Hosting Static Websites (GitHub Pages, Netlify, Vercel)
- SEO Best Practices for HTML5 & CSS3 Websites
- Performance Optimization Techniques
- Debugging & Testing Across Different Browsers