

HTML & CSS (3 Months)

Duration: 3 Months (~120 Hours)

Mode: Live Online / Classroom

Role after completion: UI Developer / Web Designer

Certifications prepared: FreeCodeCamp Responsive Web Design, W3C HTML5 & CSS3 (optional)

Tools & Technologies: HTML5, CSS3, Bootstrap, Tailwind CSS, VS Code, Git & GitHub, Chrome DevTools

Syllabus

Week 1: Web & HTML5 Foundations

- Introduction to web: client-server, HTTP/HTTPS, DNS
- HTML5 document: , ,
- Text, links, images, lists, tables
- Basic page structure, semantics overview
- Assignment

Week 2: Advanced HTML5 & Accessibility

- Forms: inputs, validation, labels, accessibility attributes
- Multimedia: , , basics
- Semantic tags: , , , ,
- Intro to ARIA roles and semantic SEO
- Assignment

Week 3: CSS Fundamentals

- CSS syntax: selectors, properties, values
- Box model: margin, border, padding; display/positioning
- Typography, color, gradients, backgrounds
- CSS organization and file structure
- Assignment

Week 4: Responsive Layouts

- Flexbox: axes, alignment, spacing patterns
- CSS Grid: grid template areas, repeat(), minmax()
- Media queries and breakpoints (mobile-first)
- Performance & responsive images (srcset, sizes)
- Assignment
- Mock Interview 1

Week 5: Frameworks & Utilities

- Bootstrap grid, utilities, components (navbar, cards, modals)
- Tailwind CSS: utility-first workflow, responsive variants
- Theming, custom configs, design tokens
- Componentizing page sections for reuse
- Assignment

Week 6: Advanced CSS Engineering

- Animations, transitions, transforms; keyframes best practices
- CSS variables, layering & cascade strategy
- BEM methodology and modular CSS organization
- Light/dark mode design patterns
- Assignment

Week 7: Accessibility & SEO Deep Dive

- WCAG overview, keyboard navigation, focus management
- ARIA for widgets, landmarks, live regions
- SEO: meta tags, Open Graph, structured data basics
- Lighthouse audits and fixes
- Assignment

Week 8: Integration & Polishing

- Cross-browser testing, vendor differences
- Asset optimization, image compression, favicon & manifest
- Deploy static sites (Netlify/Vercel/GitHub Pages)
- Assignment
- Mock Interview 2

Projects

- Portfolio website (multi-page, responsive, SEO-friendly)
- Product landing page (Bootstrap or Tailwind)
- Accessible blog layout with semantic HTML and ARIA
- Marketing email template (table-based, responsive)