

FAIZ COMPUTER INSTITUTE

HTML and CSS Syllabus

1. Introduction to HTML and CSS

- What is HTML and CSS?
- The role of HTML in structuring web content and CSS in styling it
- Basic HTML document structure: <html>, <head>, <body>
- Introduction to inline, internal, and external CSS
- The relationship between HTML and CSS

2. Basic HTML Syntax and Structure

- Structure of an HTML document
- Basic HTML tags: <html>, <head>, <body>, <title>, etc.
- Creating headings, paragraphs, and text formatting
- Lists: , ,
- Using links (<a>), images (), and anchors for navigation
- Introduction to forms and input elements: <input>, <button>, <form>

3. Text Formatting and Styling

- HTML text formatting tags: , <i>, <u>, , , etc.
- Styling text using CSS: font family, font size, color, weight, and style
- Line spacing, letter spacing, and text alignment
- Text decoration with CSS: underline, strikethrough, and links
- Applying CSS styles using selectors, IDs, and classes

4. CSS Basics: Selectors, Properties, and Values

- CSS syntax: selectors, properties, and values
- Basic CSS selectors: element, class, and ID selectors
- Universal selector (*) and group selectors
- CSS properties for layout, background, and color
- Cascading rules in CSS: specificity, inheritance, and the cascade

5. Layout and Positioning with CSS

- Box Model in CSS: content, padding, border, and margin
- Setting the width, height, and margin/padding of elements
- CSS positioning: static, relative, absolute, fixed, sticky
- The z-index property for stacking elements
- Flexbox layout: basic concepts, properties like justify-content, align-items, flex-direction, flex-wrap
- Grid layout: creating grids with grid-template-columns, grid-template-rows, grid-gap

6. Styling Links and Navigation

- Styling anchor links (<a>) with CSS

- Link states: :link, :visited, :hover, :active
- Creating navigation menus with lists: horizontal and vertical menus
- Dropdown menus using display: none and display: block
- Using pseudo-classes for styling hover and focus states

7. Responsive Web Design and Media Queries

- Introduction to responsive design
- Setting viewport using <meta> tag
- Fluid layouts and percentage-based widths
- Media queries: targeting different screen sizes (mobile, tablet, desktop)
- Creating mobile-first designs with CSS
- Best practices for responsive images and scaling text

8. Advanced CSS Styling Techniques

- CSS transitions and animations
- Creating smooth hover effects using :hover and transition properties
- Keyframe animations: defining and applying keyframes in CSS
- CSS transforms: scale(), rotate(), translate()
- Using custom properties (CSS variables) for reusable values
- Box shadows, text shadows, gradients, and background images

9. Forms and Input Styling

- Styling HTML forms: text fields, checkboxes, radio buttons, and buttons
- Working with form controls (<input>, <select>, <textarea>, <button>)
- Customizing form elements with CSS
- Placeholder text and focus states
- Styling the submit button and form layout
- Responsive and accessible form design

10. Web Accessibility and SEO

- Importance of semantic HTML and CSS for accessibility
- Using semantic tags like <header>, <footer>, <nav>, <article>, etc.
- ARIA (Accessible Rich Internet Applications) roles and attributes
- Ensuring color contrast and readable fonts for accessibility
- SEO-friendly HTML tags: using proper headings (<h1>, <h2>, etc.), alt text for images, and meta tags
- Making forms accessible with labels and accessible inputs

11. CSS Frameworks

- Introduction to popular CSS frameworks: Bootstrap, Tailwind CSS
- Using a CSS framework to quickly build responsive layouts
- Customizing a CSS framework's default styles
- Flexbox and grid utilities in frameworks
- Implementing pre-designed components from a framework (buttons, navigation bars, cards)

12. Final Project

- **Project Ideas:**

- Build a personal portfolio website with HTML and CSS
- Design a responsive landing page with a form and navigation
- Create a product page for an e-commerce website using Flexbox or Grid layout
- Build a blog layout using semantic HTML and advanced CSS styling
- Develop a simple restaurant website with navigation, menu, and contact form

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