



## **1. HTML basics: tags, attributes, and elements**

- Understanding the syntax of HTML
- Common HTML tags and their uses
- Attributes and values in HTML tags

## **2. CSS basics: selectors, properties, and values**

- Types of CSS selectors and how they work
- CSS properties and their values
- Cascading, inheritance, and specificity in CSS

## **3. Responsive design and media queries**

- Why responsive design is important
- Setting up breakpoints for media queries
- Adjusting layout and content for different screen sizes

## **4. HTML forms and form validation**

- Creating HTML forms and their inputs
- Using form attributes for input validation
- Customizing form styles with CSS

## **5. CSS layout techniques: floats, positioning, and the box model**

- The box model and how it affects layout
- Using floats for layout
- Positioning elements with CSS

## **6. Flexbox and CSS Grid layout**

- Understanding the flexible box model (Flexbox)
- Creating complex layouts with Flexbox
- Introducing CSS Grid and its benefits

## **7. Typography: fonts, text formatting, and styling**

- Using web fonts in HTML and CSS
- Formatting text with CSS
- Styling text with CSS (color, size, weight, etc.)

## **8. HTML semantics and accessibility best practices**

- The importance of semantic HTML
- ARIA attributes for accessibility
- Implementing accessibility best practices in HTML and CSS

## **9. CSS frameworks and libraries (Bootstrap, Foundation, etc.)**

- Overview of popular CSS frameworks and libraries
- Using Bootstrap and its components
- Customizing Bootstrap with CSS variables

## **10. CSS preprocessors (Sass, Less, etc.)**

- Introduction to CSS preprocessors
- Setting up a Sass/SCSS project
- Using variables, mixins, and functions in Sass

## **11. Advanced CSS animations and transitions**

- Understanding CSS animations and transitions
- Creating complex animations and transitions with CSS
- Best practices for optimizing performance

## **12. CSS custom properties (variables)**

- Introduction to CSS custom properties
- Creating and using custom properties in CSS
- Overriding custom properties with JavaScript

## **13. Responsive images and web performance optimization**

- Strategies for optimizing image loading times
- Using responsive images in HTML and CSS
- Implementing web performance best practices in CSS

## **14. HTML5 and CSS3 features (SVG, web components, etc.)**

- Overview of HTML5 and CSS3 features
- Using SVG graphics in HTML and CSS
- Creating reusable web components with HTML and CSS

## **15. CSS grid systems and frameworks**

- Overview of CSS grid systems and frameworks
- Using popular grid systems like Bootstrap and Foundation
- Creating custom grid systems with CSS

## **16. CSS resets and normalization**

- Understanding the purpose of CSS resets and normalization
- Implementing CSS resets and normalization in your projects
- Common CSS reset libraries and frameworks

## **17. Creating and styling tables in HTML**

- Creating HTML tables
- Styling table elements with CSS
- Implementing responsive table layouts

## **18. SVG basics and graphics optimization**

- Understanding the basics of SVG graphics
- Using SVG graphics in HTML and CSS
- Optimizing SVG graphics for web use

## **19. Cross-browser compatibility and debugging**

- Techniques for testing cross-browser compatibility
- Common browser inconsistencies and how to fix them
- Using browser developer tools for debugging CSS

## **20. Advanced CSS topics (pseudo-classes,**