

## 1. Introduction to CSS

- 1.1 What is CSS?
- 1.2 Role of CSS in Web Development
- 1.3 Types of CSS (Inline, Internal, External)
- 1.4 CSS Syntax and Selectors Overview

## 2. CSS Selectors

- 2.1 Basic Selectors (e.g., Type, Class, ID)
- 2.2 Grouping and Universal Selectors
- 2.3 Attribute Selectors
- 2.4 Pseudo-classes (:hover, :focus, etc.)
- 2.5 Pseudo-elements (::before, ::after, etc.)

#### 3. CSS Box Model

- 3.1 Understanding Content, Padding, Border, and Margin
- 3.2 Border Properties (Style, Width, Color, Radius)
- 3.3 Margin and Padding Properties
- 3.4 Box Sizing (content-box vs. border-box)

# 4. CSS Colors and Backgrounds

- 4.1 Color Formats (Named, HEX, RGB, HSL)
- 4.2 Background Properties (background-color, background-image)
- 4.3 Gradient Backgrounds (Linear, Radial)
- 4.4 Advanced Background Techniques



## 5. CSS Text and Fonts

- 5.1 Font Properties (font-family, font-size, font-weight)
- 5.2 Text Properties (color, text-align, line-height)
- 5.3 Text Effects (Shadows, Decoration)
- 5.4 Using Google Fonts and Web Fonts

# 6. CSS Positioning

- 6.1 Static Positioning (Default)
- 6.2 Relative, Absolute, and Fixed Positioning
- 6.3 Sticky Positioning
- 6.4 Z-index and Stacking Context

# 7. CSS Layouts

- 7.1 Display Properties (block, inline, inline-block, none)
- 7.2 Floats and Clearfix
- 7.3 Flexbox Layout
- 7.3.1 Flex Container and Flex Items
- 7.3.2 Justify Content, Align Items, Align Self
- 7.3.3 Flexbox Practical Examples
- 7.4 Grid Layout
- 7.4.1 Grid Container and Grid Items
- 7.4.2 Defining Rows and Columns
- 7.4.3 Grid Template Areas

# 8. CSS Responsive Design



- 8.1 Introduction to Media Queries
- 8.2 Breakpoints and Fluid Layouts
- 8.3 CSS Units (px, %, em, rem, vh, vw)
- 8.4 Mobile-First Design Principles

#### 9. CSS Animations and Transitions

- 9.1 CSS Transitions (e.g., transition-property, duration)
- 9.2 CSS Animations (@keyframes, animation properties)
- 9.3 Transformations (scale, rotate, translate, skew)
- 9.4 Hover and Focus Animations

# 10. CSS Frameworks (Introduction)

- 10.1 What are CSS Frameworks?
- 10.2 Overview of Popular Frameworks (Bootstrap, Tailwind CSS)
- 10.3 Advantages and Disadvantages of Frameworks

# 11. CSS Best Practices

- 11.1 Writing Clean and Maintainable CSS
- 11.2 Naming Conventions (BEM, SMACSS)
- 11.3 Avoiding Redundancy and Overwriting Styles
- 11.4 Performance Optimization

# 12. Project

- 12.1 Creating a Responsive Web Page
- 12.2 Using Flexbox or Grid for Layouts
- 12.3 Adding Animations and Transitions



12.4 Styling Forms and Buttons