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Introduction

Cascading Style Sheets (CSS) is a fundamental technology in web development that controls the presentation and layout of HTML elements on a webpage. During my internship, I had the opportunity to explore core CSS concepts such as **Selectors, Colors, Units**, and **Typography**. These form the base of responsive and visually appealing web design.

CSS Selectors

CSS selectors are used to "select" the HTML elements we want to style.

✅ Types of CSS Selectors:

- **Universal Selector (*)**
  Applies styles to *all* elements.
  Example: * { margin: 0; padding: 0; }
- **Element Selector**
  Targets specific tags like <p>, <div>, <h1>.
  Example: p { font-size: 16px; }

- **Class Selector (.)**
  Targets elements with a specific class.
  Example: .box { background-color: lightblue; }
- **ID Selector (#)**
  Targets a single element with a unique ID.
  Example: #header { font-weight: bold; }
- **Group Selector**
  Applies the same style to multiple elements.
  Example: h1, h2, h3 { color: navy; }
- **Descendant Selector**
  Selects elements inside another element.
  Example: div p { color: gray; }
- **Pseudo-classes**
  Apply styles based on user interaction.
  Example: a:hover { color: red; }

CSS Colors

Colors in CSS can be defined in various formats to enhance visual appeal and branding.

Ways to Define Colors:

- **Color Names**
  Example: color: red;
- **Hexadecimal (#)**
  Example: color: #ff6347; *(Tomato color)*
- **RGB (Red, Green, Blue)**
  Example: color: rgb(255, 99, 71);
- **RGBA (with opacity)**
  Example: background-color: rgba(0, 0, 0, 0.5);
- **HSL (Hue, Saturation, Lightness)**
  Example: color: hsl(9, 100%, 64%);

Using these formats, I practiced designing clean and modern interfaces by choosing appropriate color combinations.

CSS Units

Units in CSS define the size of elements, text, margins, and more. Choosing the correct unit is important for responsive design.

Types of Units:

- **Absolute Units:**
  - px (pixels), cm, mm, in
  - Example: width: 300px;
- **Relative Units:**
  - em – Relative to the font size of the parent
  - rem – Relative to the root font size
  - % – Relative to the parent element
  - vw – Viewport width
  - vh – Viewport height
  - Example: font-size: 1.5em;, width: 80vw;

I learned that relative units help make websites more flexible and responsive across different screen sizes.

CSS Typography

Typography in CSS focuses on controlling how text appears on a web page.

Key Typography Properties:

- font-family: Defines the font type.
  Example: font-family: 'Arial', sans-serif;
- font-size: Controls the size of the text.
  Example: font-size: 16px;
- font-weight: Sets the thickness.
  Example: font-weight: bold;
- line-height: Space between lines of text.
  Example: line-height: 1.5;
- letter-spacing: Controls spacing between letters.
  Example: letter-spacing: 1px;
- text-align: Aligns text (left, center, right).
  Example: text-align: center;

- text-decoration: Adds styles like underline.
  Example: text-decoration: underline;

Good typography improves readability and enhances the user experience. I explored Google Fonts integration and responsive text design.

Conclusion

This internship task deepened my understanding of how **CSS selectors, color schemes, measurement units, and text styling** come together to build aesthetically pleasing and functional web pages. These core concepts are essential for every front-end developer.

Through practice and research, I now feel more confident in applying CSS principles effectively in real-world projects.

Key Learnings

- How to use various **selectors** to target elements precisely.
- Applying **color formats** and combinations to enhance design.
- Choosing the right **units** for flexible layouts.
- Enhancing **typography** for better readability and UX.

Tools Used

- Visual Studio Code

References

https://www.w3schools.com/css/