CSS GUI Basic Training

Prince Goswami

Table of Contents

2.1 Basic of CSS

2.1.1 CSS Introduction

Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation of a document written in a markup language such as HTML. CSS is designed to enable the separation of presentation and content, so that the same markup can be used with different style sheets to produce different visual appearances.

CSS is a powerful tool that can be used to control the look and feel of a web page. It can be used to change the font, color, size, and position of text, as well as the layout of images and other elements on a page. CSS can also be used to create animations and transitions.

CSS is a relatively easy language to learn, and there are many resources available to help you get started. Once you have learned the basics, you can start to experiment with CSS to create your own custom styles.

Here are some of the benefits of using CSS:

- Increased flexibility: CSS allows you to separate the presentation of a document from its content, which makes it easier to change the look and feel of a web page without having to change the markup.
- Increased control: CSS gives you a lot of control over the look and feel of a web page, so you can create exactly the right look for your website.
- Increased accessibility: CSS can be used to make web pages more accessible to people with disabilities. For example, you can use CSS to change the font size or color of text to make it easier to read.

If you are interested in learning more about CSS, there are many resources available online. You can also find books and tutorials on CSS at your local library or bookstore.

Here are some of the basic concepts of CSS:

1. Selectors: Selectors are used to select the elements that you want to style. There are many different types of selectors, such as element selectors, class selectors, and ID selectors.

2. Properties: Properties are used to control the appearance of the elements that you have selected. There are many different properties, such as font-size, color, and margin.

3. Values: Values are used to set the values of the properties. For example, the value of the font-size property can be set to "10px" or "1em".

2.1.2 Different style sheets

- **External CSS:**
    - This is the most flexible way to write CSS, and it is the recommended way to style web pages that are complex or that will be used by multiple people. External CSS is written in a separate file with the .css extension. This file is then linked to the HTML document using the link element. For example, the following code will link to an external CSS file called style.css:

```
<link rel="stylesheet" href="style.css">
```

- **Internal CSS:**
  - This is a more efficient way to write CSS, and it is the recommended way to style larger elements on a web page. Internal CSS is written in a style element in the head of the HTML document. For example, the following code will change the font size of all of the text on a web page:

```
<head>
  <style>
    h1, h2, h3, h4, h5, h6 {
      font-size: 20px;
    }
  </style>
</head>
```

- **Inline CSS:**
  - This is the simplest way to write CSS, and it is the most commonly used way to style small elements on a web page. Inline CSS is written directly in the HTML code, and it is enclosed in the style attribute. For example, the following code will change the font size of the text on a web page:

```
<h1 style="font-size: 20px;">This is a heading</h1>
```

Which way you choose to write CSS depends on the specific needs of your project. If you are only styling a few small elements on a web page, then inline CSS is a good option. If you are styling larger elements or if you want to make your code more modular, then internal CSS is a good option. If you want to style a complex web page or if you want to make your code reusable, then external CSS is a good option.

2.2.3 CSS Syntax

CSS syntax is the set of rules that govern how CSS code is written. It is important to understand CSS syntax in order to write valid and readable CSS code.

Here are the basic rules of CSS syntax:

Selectors: Selectors are used to select the elements that you want to style. There are many different types of selectors, such as element selectors, class selectors, and ID selectors.
Properties: Properties are used to control the appearance of the elements that you have selected. There are many different properties, such as font-size, color, and margin.
Values: Values are used to set the values of the properties. For example, the value of the font-size property can be set to "10px" or "1em".

Here is an example of CSS syntax:

```
h1 {
  color: red;
  font-size: 20px;
}
```

This code will change the color of all h1 elements to red and the font size of all h1 elements to 20 pixels.

2.2.4 CSS Selector

CSS selectors are used to select the elements that you want to style in your CSS code. There are many different types of CSS selectors, each with its own purpose.

Here are some of the most common CSS selectors:

- Element selectors: Element selectors are the simplest type of CSS selector. They are used to select all elements of a particular type, such as h1, p, or div.
- Class selectors: Class selectors are used to select all elements that have a particular class attribute. For example, the selector .my-class will select all elements that have the my-class class attribute.
- ID selectors: ID selectors are used to select a single element by its ID attribute. For example, the selector #my-id will select the element with the my-id ID attribute.
- Pseudo-selectors: Pseudo-selectors are used to select elements based on their state or condition. For example, the pseudo-selector :hover will select all elements that are currently being hovered over by the mouse.

Here is an example of how to use CSS selectors to style a web page:

```
h1 {
  color: red;
}

.my-class {
  font-size: 20px;
}

#my-id {
  background-color: blue;
}
```

This code will change the color of all h1 elements to red, the font size of all elements with the my-class class attribute to 20 pixels, and the background color of the element with the my-id ID attribute to blue.

2.2.5 CSS basic property

1. ***Font Properties:***

- CSS font properties are used to control the font of text on a web page. These properties include the font size, color, family, and weight.

- Here are some of the most common CSS font properties:
    - font-size: This property controls the size of text. The value can be specified in pixels, ems, or rems.
    - color: This property controls the color of text. The value can be specified in hexadecimal, RGB, or HSL.
    - font-family: This property controls the font family of text. The value can be specified as a list of font names.
    - font-weight: This property controls the weight of text. The value can be set to "normal", "bold", "bolder", or "lighter".
    - line-height: This property controls the spacing between lines of text. The value can be specified as a number or as a percentage.

2. ***Color Properties:***

- CSS color properties are used to control the color of text and other elements on a web page. There are many different ways to specify the color of an element using CSS.

- Here are some of the most common CSS color properties:
    - color: This property controls the color of text. The value can be specified in hexadecimal, RGB, or HSL.
    - background-color: This property controls the background color of an element. The value can be specified in hexadecimal, RGB, or HSL.
    - border-color: This property controls the color of an element's border. The value can be specified in hexadecimal, RGB, or HSL.
    - text-decoration-color: This property controls the color of text decorations, such as underlines and strikethroughs. The value can be specified in hexadecimal, RGB, or HSL.
    - color-scheme: This property controls the color scheme of an element. The value can be specified as a list of colors.

3. ***CSS Box Model:***

- CSS box model is a way of visualizing how elements are displayed on a web page. It divides an element into four parts: content, padding, border, and margin.

    - Content: This is the actual content of the element, such as text or images.
    - Padding: This is the space between the content and the border.
    - Border: This is the line that surrounds the element.
    - Margin: This is the space between the element and other elements on the page.
    - The CSS box model is used to control the size and position of elements on a web page. The properties of the CSS box model can be used to control the size of the content, the padding, the border, and the margin.