

CSS



Basics



PYTHONISTA PLANET

CSS (Cascading Style Sheets) allows you to apply specific styles to specific HTML elements. CSS has the control of the design and layout of a website.

The main advantage of using CSS along with HTML is that it allows you to separate style from the actual content of the website. All style related formatting should not be included in an HTML file. It is always better to store it in a separate CSS file. The CSS files ends with the extension ".css".

CSS is composed of style rules. A style rule has three parts: selector, property, and value. A set of property and values is called declarations. Declarations are separated by semicolons. The general syntax of CSS styling is like this:

```
selector{  
    property1: value1;  
    property2: value2;  
}
```

For example:

```
body{  
    background-color: white;  
    font-size: 10px;  
}
```

Types of CSS Styling

CSS styling can be done in three different ways.

1. Inline CSS

Inline CSS allows you to apply a unique style to one HTML element at a time, within the HTML document. This is done by using the style attribute in HTML.

eg: `<h1 style = "color:red;"> CSS is awesome </h1>`

2. Internal CSS

The internal CSS (also known as Embedded CSS) is used to add a unique style for a single document. It is defined in `<head>` section of the HTML page inside the `<style>` tag.

eg:

```
...  
<head>  
  <title> Pyhonista Planet </title>  
  <style>  
    h1{  
      color: blue;  
    }  
  </style>  
</head>
```

....

Inline CSS and Internal CSS are not the best methods in most cases. The recommended styling technique is External CSS.

3.External CSS

In this method, all the styling rules are put in a single text file which is saved with **.css** extension.This CSS file is then referenced in the HTML using the `<link>` tag inside the head section.

eg:

...

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

...

If we do the three types of styling simultaneously, the priority order is **inline> internal> external**.

For example, if we give styling to the h1 tag internally as *color:blue* and externally as *color:red*, then the h1 tag will be having blue color.

If two styles are given to the same tag, then the last styling will be considered.

For example:

```
h1{
  color:green;
}
h1{
  color:yellow;
}
```

In this case, h1 tag will have yellow color.

Comments

A CSS comment is enclosed in `/*` and `*/`

eg: `/* This is a CSS comment */`

Some Example CSS Styles

To include a background color:

```
body{
  background-color:#ffff11;
}
```

To include a background image:

```
body{  
  background: url("../images/cat.jpg") no-repeat center  
  center fixed;  
  background-size: cover  
}
```

To move a text to the center:

```
h1{  
  text-align: center;  
}
```

To get curvy edges:

```
table{  
  border-radius: 25px;  
}
```

There are a lot of such declaration types in CSS. You can use the appropriate ones for your needs.

Classes and IDs

Classes and ids are hooks you can assign to HTML elements to make them more specific. That you have additional identifiers to assign CSS markup to.

When we want to specifically style many similar tags, we can use classes and ids. Classes be repeatedly used but ids can't be. IDs are very specific to particular tags.

CSS uses "." (dot) to style classes whereas "#" (hash) is used to style IDs.

If an ID and a class is defined for an element, the ID will overrule the class since it has more specificity.

eg:

HTML

```
<div id="red" class="blue">  
</div>
```

CSS:

```
.blue{  
  background: black;  
  height: 160px;  
}
```

```
#red{  
  background: red;  
  height: 200px;  
}
```

Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development.

Bootstrap makes front-end web development faster and easier. Several classes and codes are predefined already in Bootstrap and we can use them directly.

Download the Bootstrap CDN (search on google) and attach or link it with the HTML file. Then, you will be able to use the features of Bootstrap classes.

Check out this official documentation for more details: <https://getbootstrap.com/docs/4.4/getting-started/introduction/>

Media Queries

Media query is a CSS technique introduced in CSS3. It uses the @media rule to include a block of CSS properties only if a certain condition is true.

This can be used to create a tailored style sheet (responsive web design) to desktops, laptops, tablets, and mobile phones.

For example:

```
@media(max-width:750px){  
  h1{  
    background-color: red;  
  }  
  h2{  
    color: blue;  
  }  
}
```

```
@media(min-width:750px){  
  h1,h2{  
    background-color: yellow;  
  }  
}
```

This media query checks the width of the window. If the width is less than 750px, it will have certain effects and if it is more than 750px, it will have some other effects as defined.

The media query is written in the CSS file (or using the style tags or attributes).



This CSS basics guide is a resource from Pythonista Planet.

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