Lecture - 4
Basics CSS

Course Code: CIS 133 & 133 L

Course Title: Website Development Essential

Course Leader: Md. Faruk Hosen

Overview

- What is CSS

- Why use CSS

- CSS Syntax

- CSS Selector

- How to Link CSS with HTML

What is CSS

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces.

What does CSS do

➢ You can add new looks to your old HTML documents.
➢ You can completely change the look of your website with only a few changes in CSS code.

Why use CSS

1. Solves a big problem

If you are developing a large website where fonts and color information are added on every single page, it will be become a long and expensive process. CSS was created to solve this problem.
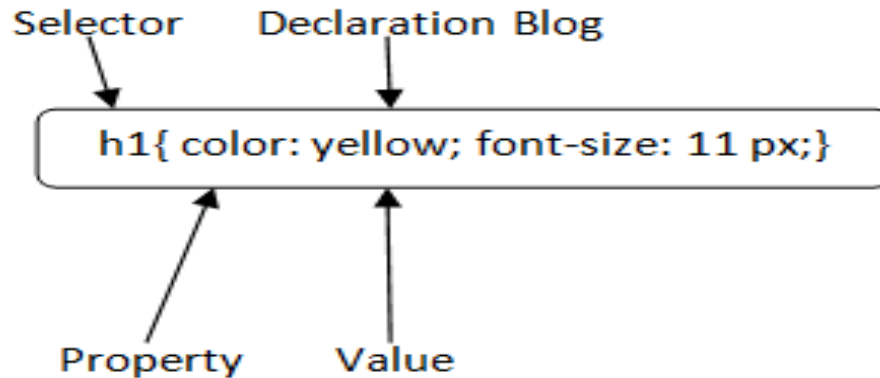
2. Saves a lot of time

CSS style definitions are saved in external CSS files so it is possible to change the entire website by changing just one file.

3. Provide more attributes

CSS provides more detailed attributes than plain HTML to define the look and feel of the website.

CSS Syntax

A CSS rule set contains a selector and a declaration block.

Selector: Selector indicates the HTML element you want to style. It could be any tag like <h1>, <title> etc.

Declaration Block: The declaration block can contain one or more declarations separated by a semicolon. For the above example, there are two declarations:

color: yellow;

font-size: 11px;

Each declaration contains a property name and value, separated by a colon.

Property: A Property is a type of attribute of HTML element. It could be color, border etc.

Value: Values are assigned to CSS properties. In the above example, value "yellow" is assigned to color property.

CSS Selectors

CSS selectors are used to select the content you want to style. Selectors are the part of CSS rule set. CSS selectors select HTML elements according to its id, class, type, attribute etc.

There are several different types of selectors in CSS.
1. CSS Element Selector
2. CSS Id Selector
3. CSS Class Selector
4. CSS Universal Selector
5. CSS Group Selector

CSS Selectors

1. CSS Element Selector

The element selector selects the HTML element by name.

Example:

```
 <style>
p{
    text-align: center;
    color: blue;
}
</style>
<body>
<p id="para1">Me too!</p>
</body>
```

CSS Selectors

2. CSS Id Selector

The element selector selects the HTML element by name.

Example:

```
<style>
p{
    text-align: center;
    color: blue;
}
</style>
<body>
<p id="para1">Me too!</p>
</body>
```

CSS Selectors

3. CSS Class Selector

The class selector selects HTML elements with a specific class attribute. It is used with a period character . (full stop symbol) followed by the class name.

Example:

```
<style>
.center {
    text-align: center;
    color: blue;}
</style>
<h1 class="center">This heading is blue and centeraligned.</h1>
<p class="center">This paragraph is blue and center-aligned.</p>
```

CSS Selectors

CSS Class Selector for specific element

If you want to specify that only one specific HTML element should be affected then you should use the element name with class selector.

Example:

```
<style>
p.center {text-align: center;  color: blue;}
</style>
<h1 class="center">This heading is not affected</h1>
<p class="center">This paragraph is blue and center-aligned.</p>
```

How to add CSS

CSS is added to HTML pages to format the document according to information in the style sheet. There are three ways to insert CSS in HTML documents.

1. Inline CSS
2. Internal CSS
3. External CSS

Inline CSS:

Inline CSS is used to apply CSS on a single line or element.

Example:

`<p style="color:blue">Hello CSS</p>`

How to add CSS

Inline CSS:

Inline CSS is used to apply CSS on a single line or element.

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1 style="color:red;margin-left:40px;">Inline CSS is applied on this
heading.</h1>
<p>This paragraph is not affected.</p>
</body>
</html>
```

Disadvantages of Inline CSS

- These styles cannot be reused anywhere else.
- These styles are tough to be edited because they are not stored at a single place.
- Inline CSS does not provide browser cache advantages.

How to add CSS

Internal CSS:

Internal CSS is used to apply CSS on a single document or page. It can affect all the elements of the page. It is written inside the style tag within head section of html.

Example:

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
    background-color: linen;
}
h1 {
    color: Red;
    margin-left: 80px;
}
</style>
</head>
<body>
<h1>The internal style sheet is applied on this heading.</h1>
<p>This paragraph will not be affected.</p>
</body>
</html>
```

How to add CSS

External CSS:

External CSS is used to apply CSS on multiple pages or all pages. Here, we write all the CSS code in a css file. Its extension must be .css for example style.css.

Example:

<mark><head></mark>

<mark><link rel="stylesheet" type="text/css" href="mystyle.css"></mark>

<mark></head></mark>

- The link tag must be used inside head section of html.