Chapter 5: Advanced feature of HTML

Introduction

- ✓ CSS Stands for Cascading Style Sheet
- ✓ It is a Style Sheet language.
- ✓ It describes the presentation of an HTML or XML document.
- ✓ CSS is used to control the web development in a simple and easy way.
- ✓ CSS was developed by Hakon Winm Lie of MIT in 1994.

Concept of Style Sheets

- ✓ Style sheet describes how documents are presented on screen.
- ✓ It is a collection of formatting rules that affect the appearance of one or more documents.

The two most common style sheets are:

1. XSLT
e**X**tensible **S**tyle sheet **L**anguage **T**ransformation.
It is applicable only for XML document.

2. CSS
Cascading **S**tyle **S**heets.
It is applicable for HTML and XML or any web language.

HTML v/s CSS

HTML	CSS
HTML stands for hyper text mark up language.	CSS stands for Cascading Style Sheet.
It specifies web page elements like table, paragraph etc.	CSS determines an element size, color etc.
It is used to identify the content of the web page.	It is used to specify the presentation of that content.
It is used for defining the web page structure.	CSS is used for styling and formatting the structured content of the web pages.

Advantages of CSS

✓ **Reusability:** It means CSS file once created can be reused.

✓ **Easy maintenance:** If any changes are required for any web page or document then changes can be simply made in a CSS file where all elements in the web pages or document will be updated automatically.

✓ **Download content faster:** CSS requires less code and controls the order of element so that content can be downloaded before images.

✓ **Platform Independent:** The scripts are platform independent and support all the latest browsers.

✓ **Data Integrity:** CSS allows to maintain the integrity of data

Limitations of CSS

CSS cannot create layout effect.
It does not give absolute control over a page's appearance.
It does not guarantee any kind of absolute pixel control.
Types of Style Sheets

There are three different types of style sheets:

1. Inline
2. Embedded or internal
3. External

1. Inline Style Sheet

The style specifications are placed within the html elements.
It uses the style attribute of the html element.

Syntax: <h1 style> … </h1>

While using the style sheet the language must be specified.
Language is specified using the <META> tag in the <HEAD> section of the document.

Syntax: <head> <meta http-equiv="Content-style-type" content="text/css"> </head>

It is the most common method of attaching a style sheet to an HTML document.

The inline style sheet is used to apply declaration style to an individual element in a particular document.

Inline style sheet should be avoided in two cases:

If we want to apply the same style declaration to different elements every time.

Inline style sheet mixes the content with the presentation. So, if you want to avoid this mixing up, don't use Inline style sheet.

Example: Demonstration of inline style sheet

```
<html>
    <head>
        <title> Inline CSS</title>
        <meta http-equiv="content-style-type" content="text/css">
    </head>
    <body style="background:orange">
        <h1 style="color:White; font-family:arial; font-size:14pt; text-transform:uppercase; text-align:left;"> This is an example of inline css</h1>
    </body>
</html>
```

Output:

THIS IS AN EXAMPLE OF INLINE CSS

2. External style sheet

In external style sheets, the CSS files are kept separately from an HTML document.

External CSS file contains only CSS code and it is saved with a ".css" extension.

The CSS file is used as an external style sheet file in HTML document by using a <LINK> tag instead of <STYLE> tag.

The <LINK> tag is placed in the <HEAD> section of the HTML document.

The main advantage of External style sheet is that external CSS is a "true separation" of style and content.

It is easier to reuse CSS code in any separate file.

Syntax:
                                                                      <HEAD> <LINK REL="stylesheet" TYPE="text/css" HREF="mystyle.css">
</HEAD>

Attributes of <LINK> tag

1. rel

It is used to specify a relationship of CSS with HTML document.

Its default relationship value is "style sheet".

Possible relationship values are stylesheet/alternate stylesheet.

2. type

Type attribute is not used in META tag.

It specifies which type of style language is used.

The value of the type attribute is "text/CSS".

3. href

It points to the external style sheet file's URL.

It specifies the path of the style sheet file which is linked with the HTML document.

4. title

It is optional.

It indicates the name of the style sheet.

5. media

It specifies the medium on which style sheet should be applied.

Its default value is screen.

The values can be screen/print/projection.

Example: Demonstration of external style sheet

NOTE: Save following program as external.css

```css
body { background:#ccffff;}
h2,p {
      color: green;
      font-family:arial;
      text-align:center;
      }
p i{
     color: orange;
     border-style: solid;
     font-weight: lighter;
     }
.ex{color:purple}
```