CSS

Simply put: Cascading Style Sheets (CSS) is a way to separate the document structure from the document presentation.

The advantages are multiple: CSS enables richer design as opposed to HTML and saves time – an entire web site style can be changed by changing a single file. Its compact dimensions enable fast loading time of the web pages.

HTML defines the structure of the elements:

- headings,
- paragraphs,
- tables,
- lists,
- forms
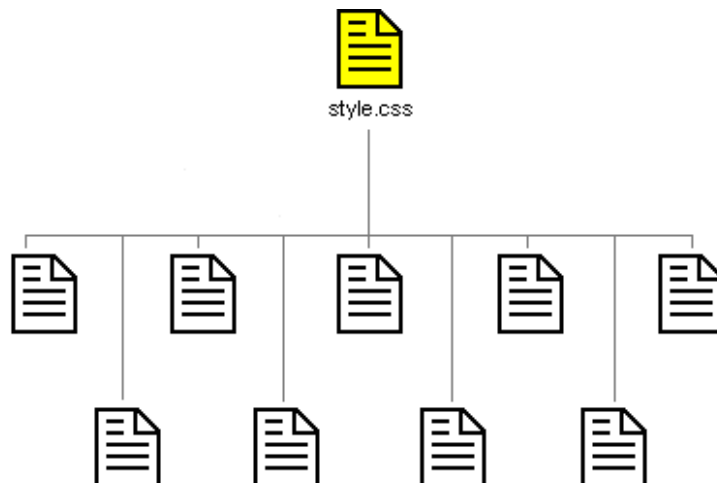- divisions
- parts of text
- etc

Web design demanded more and more aesthetical tools.

Therefore, in 1996 W3C introduced a new way to design web pages (CSS - Cascading Stylesheets) .

CSS sets the visual effects of the web pages, like:

- dimensions,
- color,
- layout,
- ...

A CSS defined once, can be reused multiple times.

style.css

There are 6 types of CSS

- Predefind in the browser

- User defined style in the browser

- Embedded style – implemented using the style tag applied to the entire document

- Inline style - implemented using the style attribute in the tag applied to the tag itself

- Linked style connected to the document with a link element in the head tag

- Imported style – similar to the imported style, enabling importing styles in the imported styles

Cascade priority

1. Browser default

2. External (linked, imported)

3. Internal style in the head tag

4. Internal style in the tag itself

If there are multiple linked styles, and if some definitions are found in both places, the last style is applied.

Styles are inherited.

If a style is defined in the body tag, it is applied to all elements (children) to that tag.

The inline style is defined like this:

```
<таг   style="property : value">
```

or

```
<h1 style="color: gray; font-size:
24px;">
    Some heading
</h1>
```

Some heading

```
<p style="background: blue; color: white;">
    Сина позадина со бели букви
</p>
```

Сина позадина со бели букви

Embedded styles consist of rules

Rules are written in the style tag within the head tag

```
<head>
    <style>
```

```
            rules;
        </style>
    </head>
```

Every rule has three parts

- Selector that determines the part of the document
  the rule applies to (example - paragraphs)

- Property that determines the effects example color)

- Value of the property (example purple)

Rules are set like this

selector { property : value }

Examples

body { color: purple };

body { background-color: #d8da3d }

p {text-align:center};

p {color:red}

When rules relate to the same selector, they are usually written together and separated with a ;

body { color: purple ; background-color: #d8da3d }

the background-color and color apply to the entire document

p {text-align:center ; color:red}

the text-align and color apply to paragraphs only

Selectors can be gruped

h1,h2,h3,h4,h5,h6
{
color: green
}

Grouping two selectors:

h2, p {color: gray;}

the style applies to all h2 and all p tags.

There is no limit on the number of grouped selectors:

```
body, table, th, td, h1, h2, h3, h4, p, pre, strong, em, b, i
{color: gray;}
```

Advantages of grouping are obvious:

```
h1 {color: purple;}
h2 {color: purple;}
h3 {color: purple;}
h4 {color: purple;}
h5 {color: purple;}
h6 {color: purple;}

h1, h2, h3, h4, h5, h6 {color: purple;}
```

Grouping combinations can be made:

```
/* group 1 */
h1 {color: silver; background: white;}
h2 {color: silver; background: gray;}
h3 {color: white; background: gray;}
h4 {color: silver; background: white;}
b {color: gray; background: white;}

/* group 2 */
h1, h2, h4 {color: silver;}
h2, h3 {background: gray;}
h1, h4, b {background: white;}
h3 {color: white;}
b {color: gray;}

/* group 3 */
h1, h4 {color: silver; background: white;}
```

```
h2 {color: silver;}
h3 {color: white;}
h2, h3 {background: gray;}
b {color: gray; background: white;}
```

12.1. Applying styles

CSS are applied to the document in three ways:

- Inline in the XHTML tag

- Embedded in the head tag

- External linking

12.1.1. Inside the HTML tag

We use the XHTML attribute style. Found in all XHTML tags. Example with body

```
<html>
      <head>
            <title>Example</title>
      </head>
      <body style="background-color: #FF0000;">
            <p>The background of the page is red</p>
      </body>
</html>
```

The background of the page is red

Пример

```
<html>
    <head>
          <title>css</title>
    </head>
    <body>
    <p>
          This paragraph is shown with the predefined
attributes of the web browser.
    </p>
    <p style="font-size: 25pt; font-weight:bold; font-
    style:italic; color:red;">
          By adding an inline CSS in the paragraph, the
          predefined attributes are changed
    </p>
```

```
    <p>
        This paragraph is shown with the predefined
        attributes of the web browser.
    </p>
    </body>
</html>
```

This paragraph is shown with the predefined attributes of the web browser.

By adding an inline CSS in the paragraph, the predefined attributes are changed

This paragraph is shown with the predefined attributes of the web browser.

An often error is using quotation marks in CSS styles embedded in the tag

```
    <p style="background: url("nebo.jpg");">

        Incorrect

    </p>
```
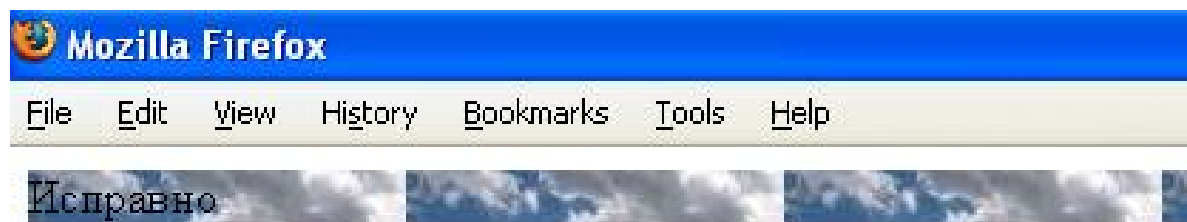
In this case, the quotation marks will be interpreted as end of the style

Right way:

```
<p style="background: url(nebo.jpg);">
     Correct
</p>
```


nebo.jpg

Try this code in a browser


```
<html>
    <head>
        <style>    </style>
    </head>
    <body>
        <p style="background: blue; color: white;">
                New background and font color inline
CSS
        </p>

        <p style="background:
url("http://www.degraeve.com/images/beach.jpg ");">
                This background will not be shown
        </p>

        <p style="background:
url(http://www.degraeve.com/images/beach.jpg);">
                This background will be shown only if
connected online
        </p>
    </body>
</html>
```

Нова позадина и боја на фонт со inline CSS

Оваа позадина нема да биде прикажана

Оваа позадина ќе биде прикажана доколку сте приклучени на Интернет

12.1.2. Embeding style in the head tag

```
<html>
     <head>
          <title>Example </title>
          <style type="text/css">
               body {background-color: #FF0000;}
          </style>
     </head>
     <body>
          <p>The background of the web page is
red</p>
     </body>
</html>
```

With

```
p { color: purple };
```

all paragraphs are purple.

If we want only one paragraph to be red, we can put a div tag that defines a logical structure in the document

```
<div>
    <p>
        Text
    </p>
</div>
```

This rule is used:

```
div p {color:purple;}
```

A separate style for a part of the document can be defined like this

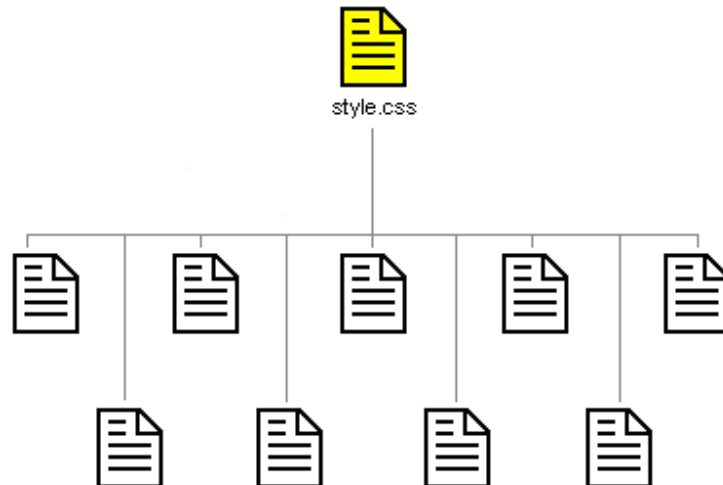If we want only one paragraph to have this color, a span tag can be inserted

```
<p>
    Text,text,text,...
    <span>
        Text
    </span>
    Text,text,text,...
</p>
```

12.1.3. Linking

The most recommended method.

It is a simple text file with a css extension linked in the head tag of the XHTML code

One CSS can be linked to multiple documents

style.css

```
<html>
      <head>
            <title>Example</title>
```

```html
        <link rel="stylesheet" type="text/css"
href="stil2.css" />
    </head>
    <body>
        <h1>Example of linking CSS</h1>
    </body>
</html>
```
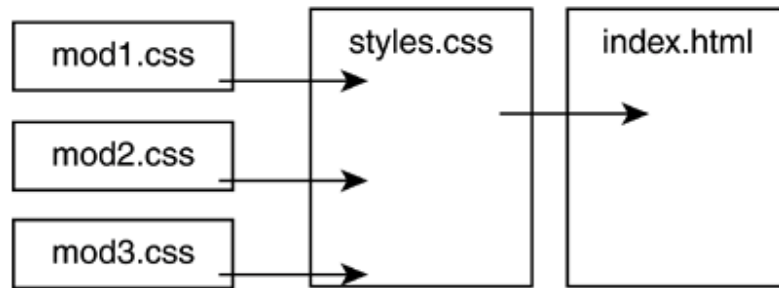
12.1.4. Imported CSS

Importing is similar to linking

A separate file for every CSS group.

Files are imported in one global css file that is then imported

Or thy are all imported in the document

The directive @import is used to import directly in the document

```
<head>
     <title>Work with CSS</title>
     <style type="text/css">
          @import url(imported.css);
     </style>
</head>
```