

# Lecture 13

## CSS



# CSS Introduction

- **CSS stands for Cascading Style Sheets**
- **CSS describes how HTML elements are to be displayed on screen, paper, or in other media**
- **CSS saves a lot of work. It can control the layout of multiple web pages all at once**
- **External stylesheets are stored in CSS files**

**CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.**



# CSS Basic & Syntax

A CSS rule consists of a selector and a declaration block. The selector points to the HTML element you want to style. The declaration block contains one or more declarations separated by semicolons. Each declaration includes a CSS property name and a value, separated by a colon. Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

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



# CSS How To

**When a browser reads a style sheet, it will format the HTML document according to the information in the style sheet.**

**There are three ways of inserting a style sheet:**

- **External CSS**
- **Internal CSS**
- **Inline CSS**

**With an external style sheet, you can change the look of an entire website by changing just one file! Each HTML page must include a reference to the external style sheet file inside the <link> element, inside the head section.**



# CSS Selectors

**A CSS selector selects the HTML element(s) you want to style. CSS selectors are used to "find" (or select) the HTML elements you want to style.**

**We can divide CSS selectors into five categories:**

- **Simple selectors (select elements based on name, id, class)**
- **Combinator selectors (select elements based on a specific relationship between them)**
- **Pseudo-class selectors (select elements based on a certain state)**
- **Pseudo-elements selectors (select and style a part of an element)**
- **Attribute selectors (select elements based on an attribute or attribute value)**



# The CSS element Selector

The element selector selects HTML elements based on the element name. Here, all `<p>` elements on the page will be center-aligned, with a red text color:

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



# The CSS id Selector

The id selector uses the id attribute of an HTML element to select a specific element. The id of an element is unique within a page, so the id selector is used to select one unique element! To select an element with a specific id, write a hash (#) character, followed by the id of the element.

```
#para1 {  
    text-align: center;  
    color: red;  
}
```

# The CSS class Selector

The class selector selects HTML elements with a specific class attribute. To select elements with a specific class, write a period (.) character, followed by the class name. HTML elements can also refer to more than one class. In this example all HTML elements with class="center" will be red and center-aligned:

```
.center {  
    text-align: center;  
    color: red;  
}
```





# The CSS Universal Selector

The universal selector (\*) selects all HTML elements on the page.



```
* {  
  text-align: center;  
  color: blue;  
}
```

# The CSS Grouping Selector

The grouping selector selects all the HTML elements with the same style definitions. It will be better to group the selectors, to minimize the code. To group selectors, separate each selector with a comma.

```
h1, h2, p {  
    text-align: center;  
    color: red;  
}
```



# CSS Comments

CSS comments are not displayed in the browser, but they can help document your source code. Comments are used to explain the code, and may help when you edit the source code at a later date. Comments are ignored by browsers. A CSS comment is placed inside the `<style>` element, and starts with `/*` and ends with `*/`:

`/* This is a single-line comment */`

Comments can also span multiple lines:

`/* This is  
a multi-line  
comment */`