

Week 13

Trinity Web Site Design

The text "C.S.S." is displayed in a large, bold, black sans-serif font. It is centered within a solid yellow rectangular background.

What is CSS?

- **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**

# Why Use CSS?

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 Solved a Big Problem

HTML was NEVER intended to contain tags for formatting a web page!

HTML was created to **describe the content** of a web page, like:

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

When tags like `<font>`, and color attributes were added to the HTML 3.2 specification, it **started** a nightmare for web developers.

Development of large websites, where fonts and color information were added to every single page, became a long and expensive

process

process.

To solve this problem, the World Wide Web Consortium (W3C) created CSS.

CSS removed the style formatting from the HTML page!

## CSS Saves a Lot of Work!

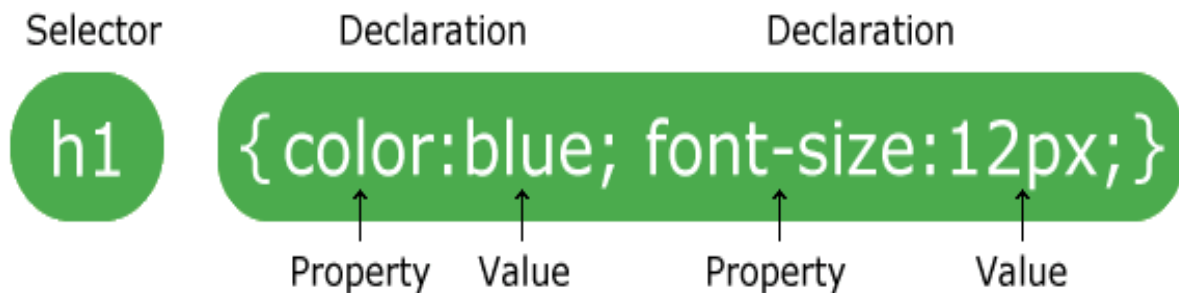
The style definitions are normally saved in external .css files.

With an external stylesheet file, you can change the look of an entire website by changing just one file!

## CSS Syntax and Selectors

# CSS Syntax

A CSS rule-set 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.

A CSS declaration always ends with a semicolon, and declaration blocks are surrounded by curly braces.

In the following example all `<p>` elements will be center-aligned, with a red text color:

```
<!DOCTYPE html>
<html>
<head>
<style>
p {
  color: red;
  text-align: center;
}
</style>
</head>
<body>
```

```
</body>
```

```
<p>Hello World!</p>
```

```
<p>These paragraphs are styled with CSS.</p>
```

```
</body>
```

```
</html>
```

Within Browser:

Hello World!

These paragraphs are styled with CSS.

## CSS Selectors

CSS selectors are used to "find" (or select) HTML elements based on their element name, id, class, attribute, and more.

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### The element Selector

The element selector selects elements based on the element name.

You can select all <p> elements on a page like this (in this case, all <p> elements will be center-aligned, with a red text color):

text-align: center; color: red; text-align: center; color: red; text-align: center; color: red;

## Example

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

## The id Selector

The id selector uses the id attribute of an HTML element to select a specific element.

The id of an element should be 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.

The style rule below will be applied to the HTML element with id="para1":

## Example

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

```
<!DOCTYPE html>
<html>
<head>
<style>
#para1 {
    text-align: center;
    color: red;
}
</style>
</head>
<body>
```

```
<p id="para1">Hello World!</p>
<p>This paragraph is not affected by the style.</p>
```

```
</body>
</html>
```