

# CSS Notes

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# CSS Basics

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CSS – Cascading Style Sheets

- Keeps your document content and presentation style separate
- Allows changes to the layout without changing the document

# Where is the style sheet located?

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1. External or linked style sheets are in a file

Ex. `<link rel="stylesheet" href="mycss.css" type="text/css" />`

Linked style sheets can be linked to from multiple webpages. This provides for consistency of style across a website. It also provides a single location to update for changes in style.

# Where is the style sheet located?

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2. Embedded or global style sheets are in the HTML document within the `<style>` element of the `<head>` element.

A global style sheet is used in a single webpage but refers to multiple elements within the webpage.

# Example of using a global style

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Example:

```
<head>
  <title>My title</title>
  <style>
    p {
      color: red;
      font-family: verdana;
    }
  </style>
</head>
```

# In-line styles

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Applied to a single element within the start tag of an element.

Example:

```
<p style="color:red; font-family:verdana;">  
text for the paragraph here  
</p>
```

# Style Precedence

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The style closest to the element takes precedence

Inline → global (embedded) → linked (external)

# Hierarchy of a style sheet

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- Style Sheet
- Rule
- Selector
- Declaration
- Property
- Value

```
h1 { color: black;  
      font-size: 1.2em;  
}
```



# Comments in a CSS file

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```
/* comment goes here  
    and can span multiple  
    lines  
*/
```

# CSS properties are used to style the elements on the web page

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1. Font properties  
font-family, font-size
2. Text properties  
spacing, alignment, blinking
3. Color & image properties
4. Border properties  
color, margins, padding
5. Display properties  
- for structure, placement, block

# CSS rules have two parts: selector and property declarations

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The selector can contain

- A single element selector
- A class/id selector
- Or a list of selectors

Each property is separated by a semicolon

# CSS selectors

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Universal	*
Elements by name	element name (ex. p)
Class	.
Id	#
Descendant combinator	space
Direct child	>
First Child (pseudo-class)	:first-child

# CSS selectors

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Sibling combinatory ~

Adjacent sibling +

Pseudo-elements ::first-line, ::first-letter, ::before, ::after

Pseudo-classes :first-child, :last-child, :link, :visited, :focus, :hover, :active

Attribute element[attribute]

Attribute value equals element[attribute = "value"]

Attribute value contains element[attribute \*= "value"]

# Example

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```
h1 {  
    color: black;  
    font-size: 12pt;  
    font-family: arial  
}
```

The semicolon is not required on the last property or a single property (however, it is recommended).

# Indicating color

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- `color: blue;`
- `color: #0000FF;`
- `color: #00F;`
- `color: rgb(0,0,255);`
- `color: rgba(0,0,255, .5);`
- `color: hsl(240,100%,50%);`
- `color: hsla(240,100%,50%, .5);`

Hue (0-360 degrees) - Saturation - Lightness/Luminosity  
- Alpha channel (Opacity)

# Indicating size

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- font-size: 12pt;
- font-size: 12px;
- font-size: .75em;
- font-size: 75%;



# Backgrounds using CSS

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- `background-image: url(turtle.jpg);`
- `background-repeat: repeat-x;`
- `background-position: top right;`
- Background-attachment
  - scroll - Background image scrolls with the page.
  - fixed - Background image does not scroll with the page.
- Background using shorthand:  
`background: yellow url(turtlesmall.jpg) bottom left repeat-x;`
- Background using a gradient  
`background: linear-gradient(to top, rgba(255,0,0,0), rgba(255,0,0,1));`

# Precedence

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How specific is the selector?

Is it !important?

# Specificity

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A B C D

- Universal selector 0000
- A 1 if selector is on the style attribute in html
- B 1 for each id selector
- C 1 for each attribute, pseudo-class, or class
- D 1 for each element name