

COSC 122: Computer Fluency



Style Attribute

- The **style** attribute can be added to a tag to control its appearance
- Different settings are separated by semi-colons
- Example:

```
<body style = "background-color:black; color: white;">
```

- Some common style settings:

background-color	e.g. background-color:yellow
font-family	e.g. font-family:"Times New Roman"
font-style	e.g. font-style:italic
font-size	e.g. font-size:100%
color	e.g. color:red
text-align	e.g. text-align:center

HTML Colors

- Color can be used for both background and text
- A color is specified either by name (red, yellow, orange) or by hexadecimal RGB color numbers (format: #RRGGBB)
- Examples:
`<body style="background-color:silver; color:yellow">`
`<p style="color:red">Red font</p>`
`<p style="color:#FF8E2A">Orange font</p>`
- Color code reference:
<https://htmlcolorcodes.com/>

Example Color Codes

Color	RGB Intensity	Hexadecimal
Black	(0, 0, 0)	#000000
White	(255, 255, 255)	#FFFFFF
Red	(255, 0 , 0)	#FF0000
Green	(0, 255, 0)	#00FF00
Blue	(0, 0, 255)	#0000FF
Aqua	(0, 255, 255)	#00FFFF
Fuchsia	(255, 0, 255)	#FF00FF
Yellow	(255, 255, 0)	#FFFF00

Text Examples

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

```
<h1 style="color:blue;">A Blue Heading</h1>
```

A very long sentence with
different color words.

```
<p style="color:orange;">An orange paragraph.</p>
```

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

Text Examples

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<html>  
<body>
```

```
<h1 style="color:blue;">A Blue Heading</h1>
```

A very long sentence with
different color words.

```
<p style="color:orange;">An orange paragraph.</p>
```

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

A Blue Heading

A very long sentence with different color words.

An orange paragraph.

Cascading Style Sheets (CSS)

- CSS is a language for controlling the appearance of web pages, especially color, layout, and fonts.
- How it works:
 - In the CSS source, you define the markup tag and its formatting.
 - When that tag is used in your HTML page, the formatting is automatically applied
 - This makes changes easier!

Three Ways to Insert CSS

- **Inline** - by using the style attribute inside HTML elements
(previous text examples)
 - Styles apply only to the individual element where the attribute is used
 - **Highest Precedence:** overrides styles defined in both external and internal style sheets.
- **Internal** - by using a <style> element in the <head> section
(next example)
- **External** - by using a <link> element to link to an external CSS file
uses a .css file
 - Can apply to multiple files at once

Tables Style in HTML

- To add a border to your table, we can add one using a style tag in the head section:

```
<style>
```

```
table, th, td {
```

```
    border: 1px solid black;
```

```
}
```

```
</style>
```

Table Border Example

One	Two	Three
A	A	A
B	B	B

```
<html>
```

```
<body>
```

```
<table>
```

```
<th>One</th>
```

```
<th>Two</th>
```

```
<th>Three</th>
```

```
<tr>
```

```
<td>A</td> <td>A</td> <td>A</td>
```

```
</tr>
```

```
<tr>
```

```
<td>B</td> <td>B</td> <td>B</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Table Border Example

One	Two	Three
A	A	A
B	B	B

```
<html>
```

```
<body>
```

```
<table border=1>
```

```
<th>One</th>
```

```
<th>Two</th>
```

```
<th>Three</th>
```

```
<tr>
```

```
<td>A</td> <td>A</td> <td>A</td>
```

```
</tr>
```

```
<tr>
```

```
<td>B</td> <td>B</td> <td>B</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Table Border Example

One	Two	Three
A	A	A
B	B	B

```
<html>
<head>
  <style>
    table, th, td {
      border: 1px solid black;
    }
  </style>
</head>

<body>

  <table>
  <th>One</th>
  <th>Two</th>
  <th>Three</th>
  <tr>
    <td>A</td> <td>A</td> <td>A</td>
  </tr>
  <tr>
    <td>B</td> <td>B</td> <td>B</td>
  </tr>
  </table>

</body>
</html>
```

What's the Difference?

- `<table border=1> ... </table>` seems simpler
- `<style> table, th, td { ... }` seems complicated
- Which is better?



Try This Example

```
<html>
<head>
    empty head section
</head>
<body>
    <h1>Welcome to My Page</h1>
    <p>This is a paragraph styled with internal CSS.</p>
    <p>Another paragraph with the same styling.</p>
</body>
</html>
```

Try This Example

```
<html>
<head>
</head>
<body>
  <h1>Welcome to My Page</h1>
  <p>This is a paragraph styled with internal CSS.</p>
  <p>Another paragraph with the same styling.</p>
</body>
</html>
```

empty head section

Welcome to My Page

This is a paragraph styled with internal CSS.

Another paragraph with the same styling.

you should
get this



Add to Head Section

```
<html>
<head>
  <style>
    h1 {
      color: blue;
      font-size: 36px;
      text-align: center;
    }
    p {
      color: green;
      font-size: 18px;
    }
  </style>
</head>
<body>
  <h1>Welcome to My Page</h1>
  <p>This is a paragraph styled with internal CSS.</p>
  <p>Another paragraph with the same styling.</p>
</body>
</html>
```

Welcome to My Page

This is a paragraph styled with internal CSS.

Another paragraph with the same styling.

Another Text Example

```
<html>
<head>
  <style>
    body {background-color: powderblue;}
    h1   {color: blue;}
    p    {color: red;}
  </style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Another Text Example

```
<html>
<head>
  <style>
    body {background-color: powderblue;}
    h1    {color: blue;}
    p     {color: red;}
  </style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

you should
get this



This is a heading

This is a paragraph.

External Stylesheet

- Inside head section, link to .css file
- Example:
`<link rel="stylesheet" href="styles.css">`
- Have all the styles defined in the .css file
- Example, inside styles.css:

```
body { background-color: powderblue; }
```

```
h1 { color: blue; }
```

```
p { color: red; }
```

← same code you would have put inside
`<style> ... </style>`
in the last internal css example

Styling Links

- Remember the `<a>` `` tag used to reference a link
- What does this do?

`<p>A link to another page</p>`

Styling Links

- Remember the `<a>` `` tag used to reference a link
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A link to another page

```
<p>A <a href="index.html" target="_blank">link</a> to another page</p>
```

Styling Links

- Remember the `<a>` `` tag used to reference a link
- What does this do?

A link to another page

`<p>A link to another page</p>`

- Change its style internally:

```
<html>
<head>
<style>
a {
  color: hotpink;
  background-color: yellow;
  font-weight: bold;
}
</style>
</head>
<body>
<p>A <a href="index.html" target="_blank">link</a> to another page</p>
</body>
</html>
```

Styling Links

- Remember the `<a> ` tag used to reference a link
- What does this do?

A link to another page

`<p>A link to another page</p>`

- Change its style internally:

```
<html>
<head>
<style>
a {
  color: hotpink;
  background-color: yellow;
  font-weight: bold;
}
</style>
</head>
<body>
<p>A <a href="index.html" target="_blank">link</a> to another page</p>
</body>
</html>
```

A **link** to another page

Link States

- HTML links have 4 states
 - Differing in appearance depending on whether it's being hovered over or if it's been visited
 - Each state can be styled differently
- `:link` - a normal, unvisited link
- `:hover` - a link when the user mouses over it
- `:active` - a link the moment it is clicked
(A very brief and usually changes the link's appearance for the duration of the click)
- `:visited` - a link the user has visited

Styling Link States Example

- Try this with a link in the body of your HTML code:

```
<style>
```

```
  a:link { color: red; }
```

```
  a:visited { color: green; }
```

```
  a:hover { color: hotpink; }
```

```
  a:active { color: blue; }
```

```
</style>
```

...

Testing ` a link state `

- Did you see how the link changes colors?