

# Cascading Style Sheet (CSS)

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Dr. Garrett Dancik

# Three ways of inserting CSS

- An **inline style** applies to a single HTML element  
`<p style = "color:red"> This text will be red </p>`
- An **internal** style sheet applies styles over a single page, and is defined within the `<style>` element of the `<head>` section of the HTML page

```
<head>  
  <style>  
    /* makes all paragraphs red */  
    p {color:red}  
  </style>  
</style>
```

- An **external** style sheet applies styles over multiple pages. External style sheets are referenced in the `<head>` section of the page:

```
<head>  
  <link rel="stylesheet" type="text/css" href="mystyle.css">  
</head>
```

# How CSS is used

- CSS allows you to separate the style from the content  
[https://www.w3schools.com/css/css\\_intro.asp](https://www.w3schools.com/css/css_intro.asp)
- CSS allows you to specify the style of one or more elements, classes, ids, or combinations thereof (see [https://www.w3schools.com/css/css\\_combinators.asp](https://www.w3schools.com/css/css_combinators.asp))

```
<script>
```

```
/* style for both h1 headings and paragraphs */  
h1, p {color:blue}
```

```
/* style for paragraphs with class = "italic" */  
p.italic {color:black; font-style: italic}
```

```
/* style for paragraphs with id = "intro"  
p#intro {color:black; font-size: 1.5em}
```

```
/* style for all paragraphs that are inside of a div */  
div p {color:red}
```

```
</script>
```

# CSS Specificity – What happens when one element has two (or more) styles?

- Inline styles take precedence over internal and external styles
- For other cases, the most *specific* style is used:
  - Classes are more specific than elements
    - *p.class* is more specific than *p*
  - Ids are more specific than classes
    - *p#id* is more specific than *p.class*
- Specificity is determined using a scoring system explained here: <https://www.w3.org/TR/selectors-3/#specificity>
- Specificity (within a category) increases with the number of classes, ids, or elements
  - *div p* is more specific than *p*
- In the event of a tie, the most recently applied style will be used

# “Advanced” CSS

- A pseudo-class defines a special state of an element, such as when the user hovers over it.

```
/* display a border on hover */  
p:hover {border: 1px solid black}
```

- Tooltips or messages can be displayed by toggling between *display: none* and *display: block* (or *inline*) when a user hovers over an element. Note: there is also a *visibility* property that can be set to *hidden* or *visible*, but *hidden* elements take up space on a page
- Navigation bars can be created by styling an unordered list of links, as in the posted example

# Examples

- display.html
- navbar.html
- hide.html