

CASCADING STYLE SHEETS

---

THE CSS

# WHAT IS CSS?

- ▶ Presentational language for applying style to our HTML
- ▶ Separates our style from our markup
- ▶ CSS documents are loaded into the HTML page
- ▶ The browser applies style rules to the HTML content

### HOW DOES IT WORK WITH HTML?

- ▶ Use **HTML** to describe the content of the document, *not its style*.
- ▶ You use **CSS** to specify the document's style, *not its content*.

# COMMON TERMS

- ▶ Selectors

*a selector designates exactly which element or elements within our HTML to target and apply styles*

- ▶ Properties

*a property determines the styles that will be applied to that element*

- ▶ Values

*describes the behavior of a property*

- ▶ Rules

Comprise the selector and property/values

# THE ANATOMY OF A RULE (WITHOUT NOTES)

```
selector {  
    property: value;  
}
```

## THE ANATOMY OF A RULE



# THE ANATOMY OF A RULE (WITHOUT NOTES)

```
body {  
    color: orange;  
}
```

# SELECTORS

- ▶ Element Selector
- ▶ Class Selector
- ▶ ID Selector
- ▶ Advanced Selectors
  - ▶ *Relational Selectors*
  - ▶ *Pseudo Class Selectors*



## ELEMENT SELECTORS

### CSS

```
body {  
  background: black;  
  color: white;  
}
```

```
p {  
  font-size: 24px;  
}
```

### HTML

```
<body>  
  <p>What up!</p>  
</body>
```

## CLASS SELECTORS

Denoted by the use of the **period** ex: `.someClassName`

### CSS

```
.bodyClass {  
  background: black;  
  color: white;  
}
```

```
.pClass {  
  font-size: 24px;  
}
```

### HTML

```
<body class="bodyClass">  
  <p class="pClass">  
    What up!  
  </p>  
</body>
```

## ID SELECTORS

Denoted by the use of the **number/hash** ex: #someId

### CSS

```
#bodyID {  
    background: black;  
    color: white;  
}
```

```
#pID {  
    font-size: 24px;  
}
```

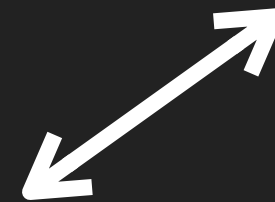
### HTML

```
<body id="bodyID">  
  <p id="pID">  
    What up!  
  </p>  
</body>
```

## SELECTORS CONT.

- ▶ Selectors in CSS correspond to elements / ids / classes in HTML
- ▶ They are **case-sensitive**.

```
<h1 id="goeags">Go Eags!</h1>
```



**"e" vs. "E"**

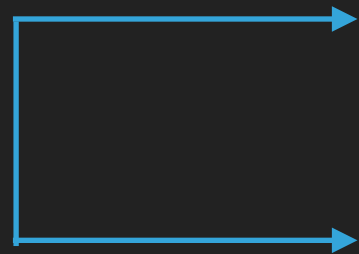
```
#goEags {  
  color: black;  
  text-transform: uppercase;  
  font-weight: bold;  
  background: red;  
}
```

## SELECTORS CONT.

- ▶ IDs(#) are unique.  
You have a student **ID**.
- ▶ Applies to HTML as well,  
not just CSS

**Elements have  
the same ID**

**This is bad.**



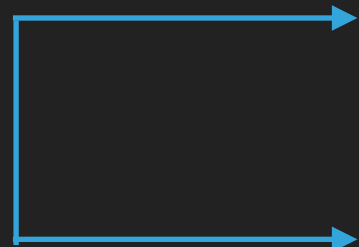
```
<p id="pTag1">#1 P Tag</p>  
<p id="pTag2">#2 P Tag</p>  
<p id="pTag1">#3 P Tag</p>
```

## SELECTORS CONT.

- ▶ IDs(#) are unique.  
You have a student **ID**.

**Elements have  
the same ID**

**This is bad.**



```
<p id="pTag1">#1 P Tag</p>
<p id="pTag2">#2 P Tag</p>
<p id="pTag1">#3 P Tag</p>
```

Javascript example: there will be confusion!

```
document.getElementById("pTag1");
```

## SELECTORS CONT.

- ▶ Classes can be **reused** and **combined**.  
As a student, you can/will have multiple classes.

```
.big {  
  font-size: 32px;  
  font-weight: bold;  
}
```

The diagram consists of three main components connected by blue lines. On the left, there are two CSS class definitions. The first, `.big`, sets `font-size: 32px` and `font-weight: bold`. The second, `.red-text`, sets `color: red`. On the right, there is an HTML code block for a paragraph: `<p class="big red-text">Go Eags!</p>`. A blue line with an arrow points from the `.big` CSS block to the `big` part of the HTML class attribute. Another blue line with an arrow points from the `.red-text` CSS block to the `red-text` part of the HTML class attribute. A third blue line connects the top of the HTML block back to the top of the `.big` CSS block, forming a loop.

```
<p class="big red-text">  
  Go Eags!  
</p>
```

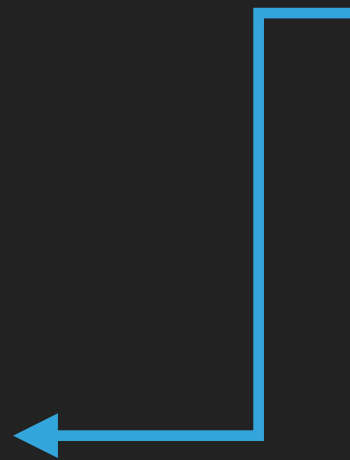
```
.red-text {  
  color: red;  
}
```

## SELECTORS CONT.

- ▶ Where does the “cascading” come in?

```
.red-text {  
  color: #990E19;  
}  
  
.red-text {  
  color: pink;  
}  
  
.red-text {  
  color: rgb(255, 0, 0);  
}
```

- ▶ Same Selector...
- ▶ Think waterfall,
- ▶ the last rule is applied.





# ADDING AN EXTERNAL STYLESHEET

- ▶ We'll write our CSS in an external file
- ▶ We'll create a reference to our CSS file on our HTML page

```
<head>  
  <!-- Goes within the head element -->  
  <link rel="stylesheet" href="main.css">  
</head>
```