

# CSS

*Cascading Style Sheets*

# What is CSS?

- Stands for Cascading Style Sheets
- Responsible for styling the look of your website
  - Remember your HTML document?
  - Remember how plain it looked?
  - You can use CSS to add color and stuff!





# Creating a CSS file

- In Notepad++, create a new text document called “styles” and save it with a .css extension
- Go to your main .html file and add this line inside the <head> ... </head> tags, after the <title>...</title>:

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

```
<html>
  <head>
    <title> Harry Potter Website! </title>
    <link rel="stylesheet" type="text/css" href="styles.css">
  </head>
  <body>
```

# Basic Syntax

## FORMAT:

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

- **selector:** what you want styled (e.g. body)
- **property:** what you want changed (e.g. background)
- **value:** the new value of that property (e.g. green)
- So you have the thing you want to style followed by a list of properties and the value for that property
  - This list must be between 2 curly braces

```
puppy{  
  hairColor: black  
  and white;  
}
```



# Example

```
body {  
    background: green;  
}
```



# Question

How would I turn the background  
of all paragraphs red?

# Answer

```
p {  
  background: red;  
}
```

# CSS in HTML docs

- CSS styles elements of HTML.
- For example, to turn all paragraphs' text green, do:

```
p {  
    color : green;  
}
```

- **Note:** selectors are generally an HTML element without "<" and ">". So "<p>" becomes "p", and "<body>" becomes "body", and "<blockquote>" becomes "blockquote"





# Practice!

- So how do you think you would implement it to make all your text blue?
  - I'll give you a hint, the element you'll want to style is <body>

- The answer:

```
body {  
    color : blue;  
}
```

*Practice makes perfect!*



# More CSS Syntax

- You can put in instructions for multiple elements by simply adding another block of code for the second element under the first

```
h1{  
  color: green;  
  background-color: yellow;  
}  
h2{  
  color: green;  
  background-color: yellow;  
}
```

*Syntax is like grammar! If you don't talk properly the computer won't understand you.*

- You can style more than 2 elements and add more than 2 attributes - you can have as many or as few as you want!





# Combining Elements

- If you have multiple elements that share the same styles, then you can combine them
  - For example remember how h1 and h2 have the same styles?

```
h2, h1 {  
  color: green;  
  background-color: yellow;  
}
```

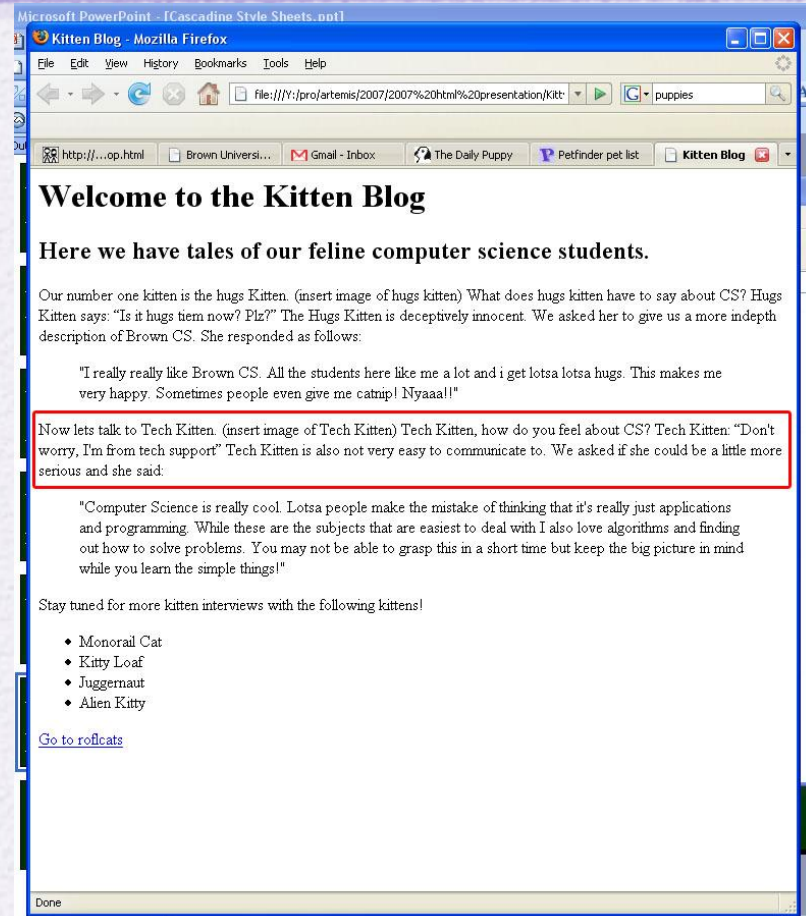
*Be Efficient*



# Selecting in CSS

- An important part in styling is learning how to select elements
  - For example

```
p{  
    color : green;  
}
```
  - In this case, “p” is called a selector, it selects the thing you want to style
- We learned how to select all paragraphs, but suppose you want to select only some?
- You’ll need to learn how to use classes





# Back to HTML: CLASSES

- Classes basically categorize certain elements

```
<p class="hugsKitty">  
    Hello, I is paragraph  
</p>  
  
<p>  
    Hello, I is paragraph also  
</p>  
  
<p class="hugsKitty">  
    Me too  
</p>
```



# Back to CSS

- Now if you specify that you want only paragraphs of hugsKitty type, then only those hugsKitty will change

```
p.hugsKitty{
```

```
    color : maroon;
```

```
}
```



Hello, I is paragraph

Hello, I is paragraph also

Me too

- So you specify element type, add a dot, and then add the class name
- More than one paragraph can have the same class



# Classes (continued)

- Different types can have the same class name. If you name an h1 element class hugsKitty, and you want both p and h1 to have the same elements then do this:

```
.hugsKitty {  
  color : maroon;  
}
```

(Just don't specify element type but keep the dot in front of the class name)

# EXAMPLE

## INPUT

```
<p class="hugsKitty">  
    Hello, I is paragraph  
</p>  
  
<h1 class="hugsKitty">  
    Hello, I is header  
</h1>
```

## OUTPUT

Hello, I is paragraph

**Hello, I is header**



# Practice!

- Create 2 classes named blueFont and purpleFont
- blueFont should make the text blue and purpleFont should make the text purple
- Apply these classes to sections of your html code

- Answer

```
.blueFont {  
    color : blue;  
}  
.purpleFont {  
    color : purple;  
}
```

*Practice makes perfect!*



# ID Selector

- Suppose you want to change the style of only **one** particular element
- Use the ID Selector!



# Back to HTML: IDs

- IDs are used to specify the style of one, unique element
- Syntax:

```
<p id="unique">  
    Me too  
</p>
```

# Back to CSS: IDs

Syntax:

```
#id_name{  
    property:value;  
}
```

Example:

```
#unique{  
    font:italic bold 30px Georgia;  
}
```



# Practice

- Transform blueFont and purpleFont classes into IDs
- Apply them to your HTML

- **Answer**

```
#blueFont {  
    color : blue;  
}  
#purpleFont {  
    color : purple;  
}
```

# KEEP IN MIND...

- An element can belong to more than one class by putting spaces between the class names
- You can select multiple elements by putting commas between them in the selector

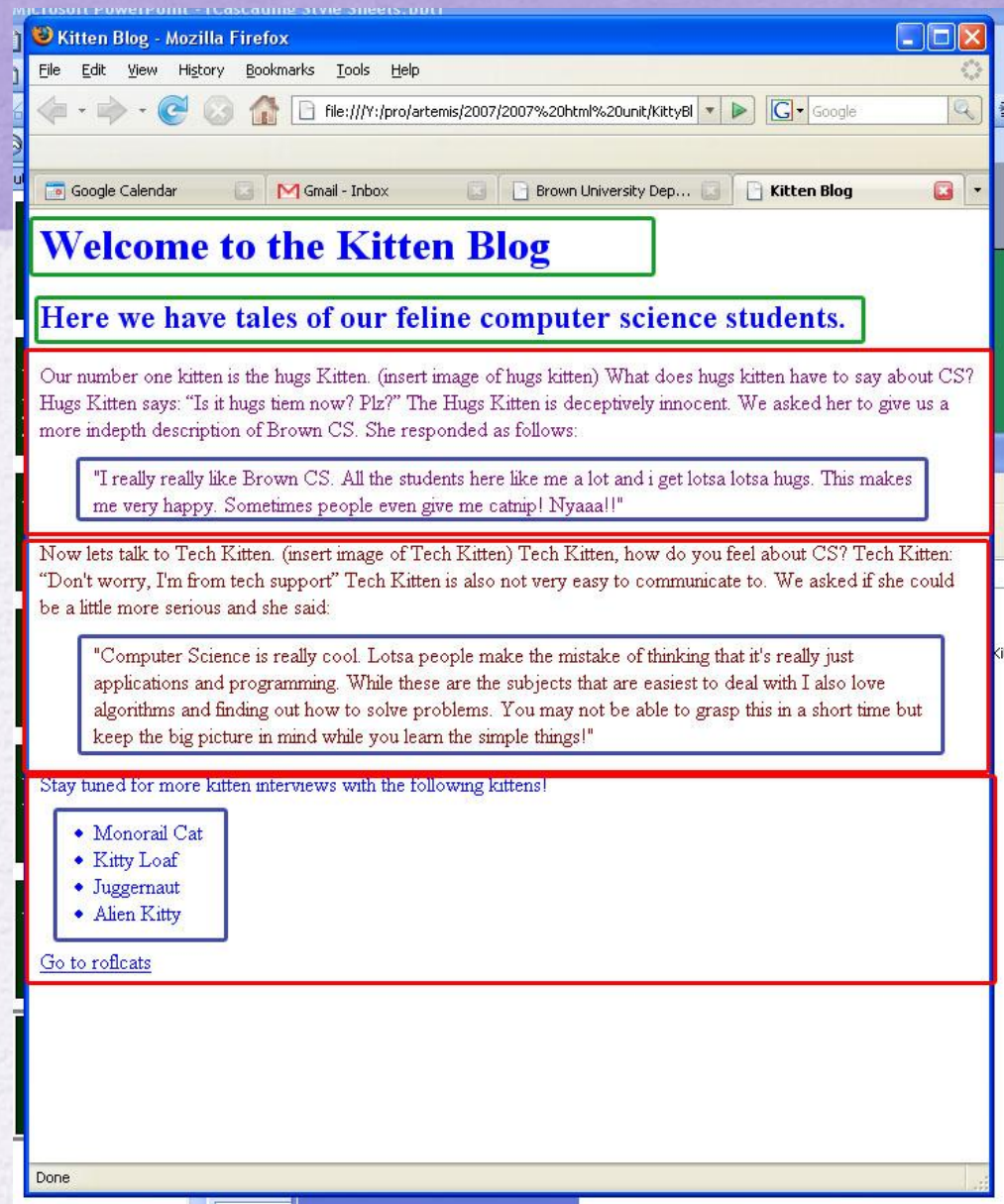


*Things  
to keep  
in mind!*



# Structure

- Structure is important if you use CSS
- Your page should be made up of blocks
- All the outlined blocks in the image are block elements



# You Can Use divs for Structure

- `<div>` `</div>` is an element in HTML
- HTML documents should consist of a bunch of nested and consecutive block elements
- `div` is a block element used for grouping other block elements
- Think of it as a container



*I'm gonna learn lots of vocabulary so people will know exactly what i mean.*



# How would you use div?

- div is used as a logical divide
  - if you have a page about cats and dogs, you can surround the cat part with `<div class = "cat"> </div>` and surround the dog part with another `<div class = "dog"> </div>`
- This lets you style everything about cats all at once, even if they're in other blocks



*I'm gonna learn lots of vocabulary so people will know exactly what i mean.*

**WITH OUT DIV**

cat cat cat cat cat  
cat cat cat  
cat cat cat cat

cat cat cat

dog dog dog  
dog dog dog dog dog  
dog dog dog dog

dog dog dog

**WITH DIV**

cat cat cat cat cat  
cat cat cat  
cat cat cat cat

cat cat cat

dog dog dog  
dog dog dog dog dog  
dog dog dog dog

dog dog dog



# Using Div

- Place the `<div>` and `</div>` wherever you think you need to group a bunch of block elements
- make sure div has a class
  - `<div class = "cats">... </div>`
- Then go ahead and style it like you would style any other element in CSS



# Try it!

- In your HTML document, group 2 paragraphs and a header in one div and 2 paragraphs and a header in another div
- Apply a different class to each div. You can use `.blueFont` and `.purpleFont`

# Your code should look like this

- HTML

```
<body>
  <div class = "purpleFont">
    <p> Paragraph 1 </p>

    <h1> Header </h1>

    <p> Paragraph 2 </p>
  </div>

  <div class = "blueFont">
    <p> Paragraph 1 </p>

    <h1> Header </h1>

    <p> Paragraph 2 </p>
  </div>

</body>
```

## CSS

```
.purpleFont{
    color:purple;
}

.blueFont{
    color:blue;
}
```

# Inheritance

- Remember all the way back to when we used

```
body{
```

```
    color: blue;
```

```
}
```

- If you think about it, body only refers to one thing, the body, but all the paragraphs and links, and text were *all* colored blue
- This is because of inheritance

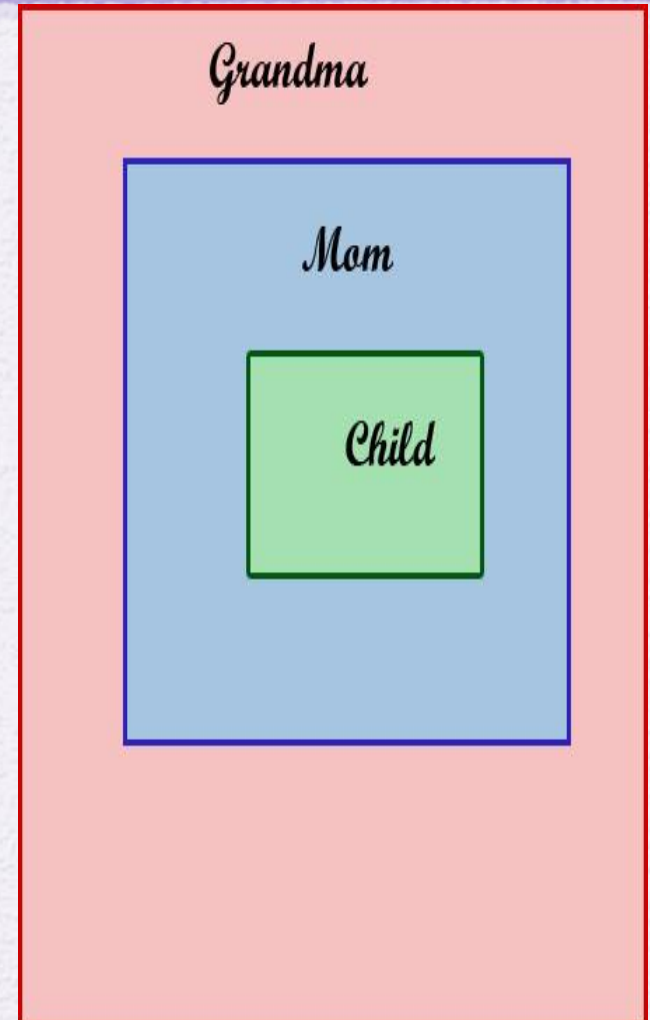


*I Inherited my orange  
hair from Mommy!*



# Inheritance Continued

- What inheritance means is that the styles you apply to a parent will also be applied to child elements
- Wait... Parent? Child? What?
  - Think of Parents as a block in the structure picture we just showed you
  - Anything inside that block is a child, it will be styled the way the big block is
  - The body element is a huge block that surrounds everything on the page



# So is that it?

- No. There are a lot more properties and values out there
- Visit this website to see more
  - [http://www.w3schools.com/css/css\\_font.asp](http://www.w3schools.com/css/css_font.asp)
  - There's a link to it on the Artemis website