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please download Aptana:

<http://aptana.com>

GDI Cincinnati

Intro to HTML/CSS: Class 2

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don't be shy. develop it.

Agenda

- Review of last week
- Intro to CSS
- Types of CSS Stylesheets
- CSS Selectors & Properties
- CSS Classes & Ids
- Basic CSS Properties: How to control fonts, colors
- Back to HTML: div and ul tags
- Time permitting: The CSS Box Model

Review Last Week : HTML

HTML History

How to find HTML: 1) View Page Source 2) Inspect Element

HTML vs CSS

How to write HTML code: Notepad/TextEdit or and HTML Editor

Aptana installment

Creating/Saving a new project

HTML Vocabulary: Tag, Element, Attribute

Exercises

- html, head, title, body, p, h1-h6
- br, character codes
- a, href, img, src
- img, src
- ol, ul
- th, tr, td
- Forms

Brief review of terms

Tag

Tags are used to denote the start of an element or the end of an element

A tag is either a start tag or an end tag. (i.e. `</p>`).

Examples of tags: ``, `<html>`, `</p>`, `</body>`

Element

An element is the start tag + its content + the end tag:

Ex: `<tag> + text + </tag>`

Attribute

Attributes provide additional information about HTML elements.

Attributes are formatted like this: `attr="value"`

The attribute always goes in the opening tag, never in the closing tag.

In `go to google`,

href is the attribute.

In ``,

src is the attribute.

HTML vs CSS

CSS stands for Cascading Style Sheets.

How does HTML fit in with CSS?

CSS was created to allow the separation of **document content** from **document presentation**.

HTML vs CSS

HTML defines the content of a document:

This is a HEADING

- this is a new bullet!

CSS defines the *formatting* and style of the content your website.

I am some blue text!

I am Courier font!

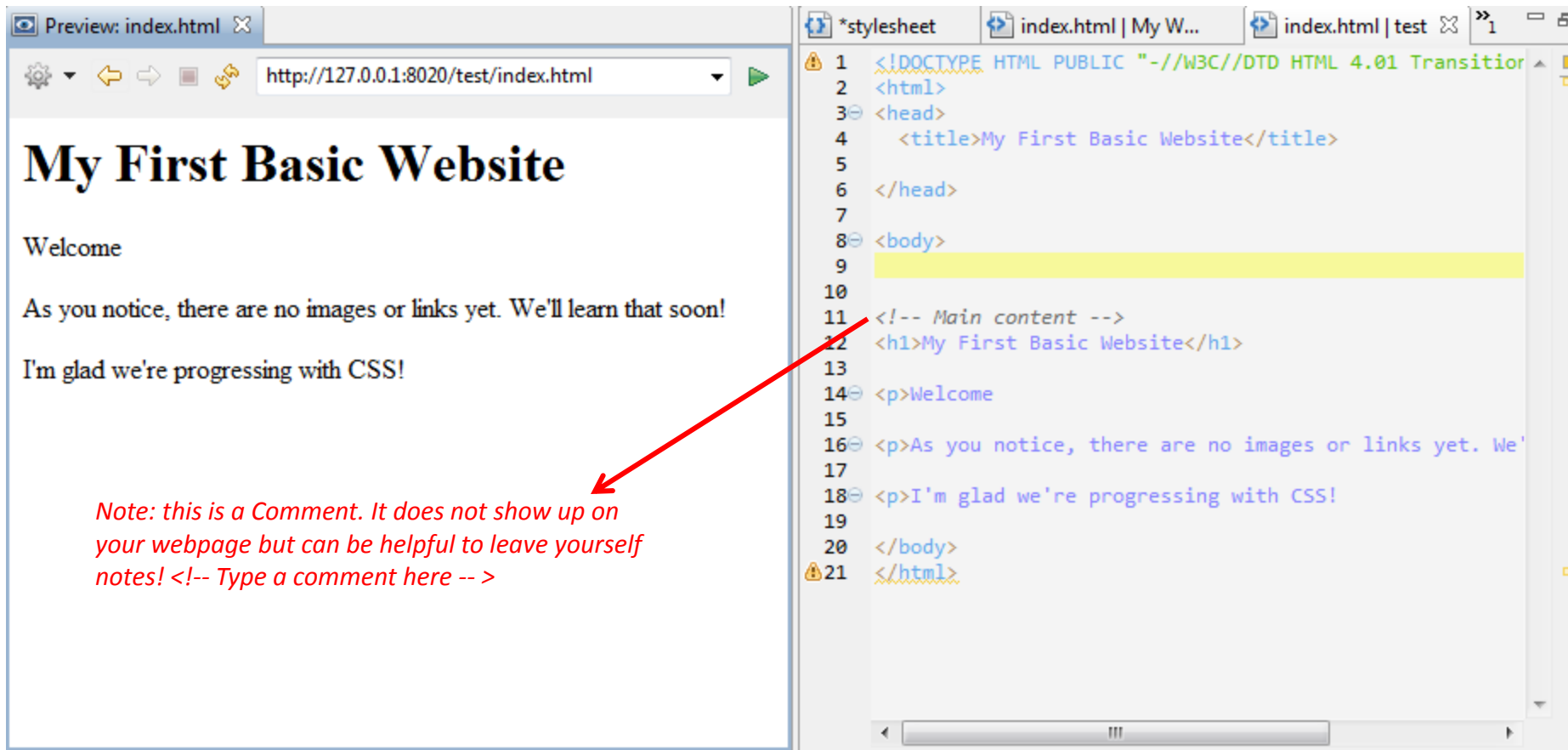
Background: CSS

CSS is what gives your page format and style.

The magic of making websites look cool and clear and visually-striking is the job of CSS

- Often, the people who are good at CSS are not programmers!
- Web designers and other artist-types tend to excel at CSS.

HTML without CSS



The image shows a side-by-side comparison of an HTML document's visual rendering and its source code. On the left, a web browser window titled 'Preview: index.html' displays the rendered page at 'http://127.0.0.1:8020/test/index.html'. The page content includes a large heading 'My First Basic Website', a 'Welcome' message, and two paragraphs of text. On the right, a code editor shows the source code for 'index.html'. The code is a basic HTML document with a DOCTYPE declaration, a head section with a title, and a body section containing the same text as the browser preview. A red arrow points from a comment in the code editor to the browser preview. The comment is: `<!-- Main content -->` on line 11. Below the browser preview, a red note explains the purpose of such comments.

Preview: index.html x

http://127.0.0.1:8020/test/index.html

My First Basic Website

Welcome

As you notice, there are no images or links yet. We'll learn that soon!

I'm glad we're progressing with CSS!

Note: this is a Comment. It does not show up on your webpage but can be helpful to leave yourself notes! <!-- Type a comment here -->

*stylesheet index.html | My W... index.html | test 1

```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional
2 <html>
3 <head>
4   <title>My First Basic Website</title>
5
6 </head>
7
8 <body>
9
10
11 <!-- Main content -->
12 <h1>My First Basic Website</h1>
13
14 <p>Welcome
15
16 <p>As you notice, there are no images or links yet. We'
17
18 <p>I'm glad we're progressing with CSS!
19
20 </body>
21 </html>
```


CSS Syntax

A CSS rule has two main parts:

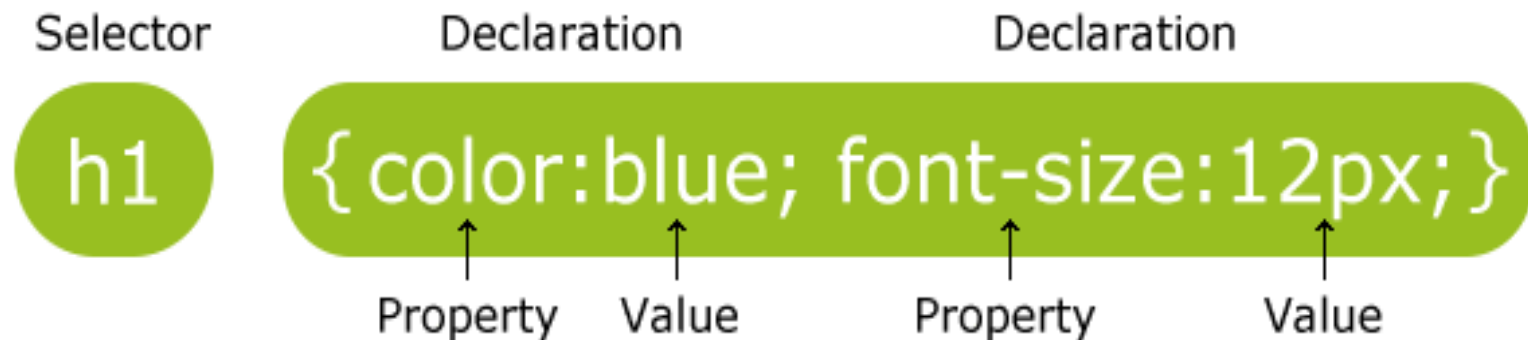
Selector

Patterns used to select the HTML elements you want to style

Declarations

Property and **value** of style you plan use on an HTML element

Much of learning CSS is about learning which CSS properties you need to use in order to get the formatting or style you want.



In a very simplified way, I like to think of these as: Property=Noun, Value=Adjective.

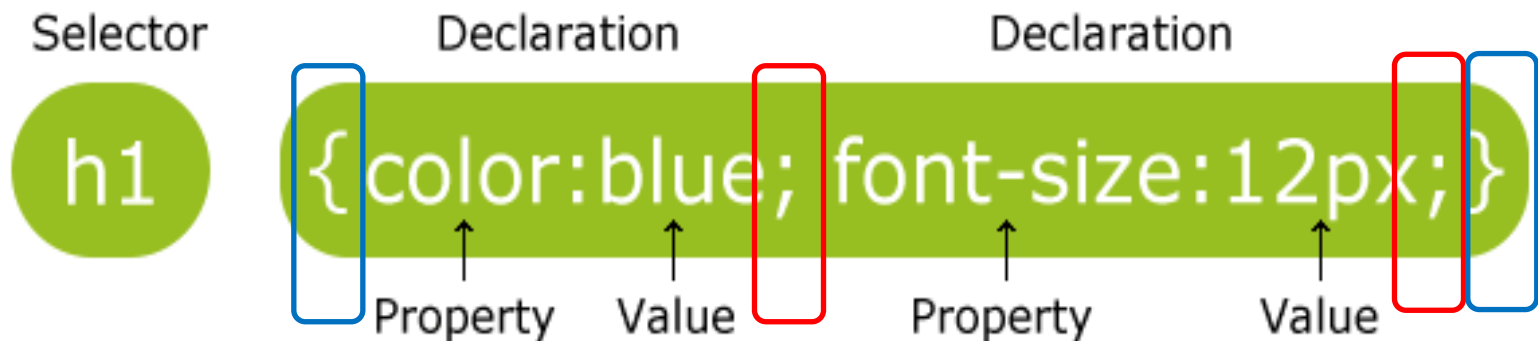
That analogy works if you don't think about it too much!

CSS Syntax

Declarations: Property and value of style you plan use on HTML element.

Declarations end with a semicolon

Declaration groups are surrounded by curly brackets.



So, in this example – your h1 header is blue and a 12 point font.

CSS Properties

Many CSS properties have self-explanatory names:

- background-color
- font-family
- font-size
- color
- width
- height

Comprehensive list of all CSS properties:

http://w3schools.com/css/css_reference_atoz.asp

CSS Stylesheets

There are 3 ways to implement CSS commands into your site:

1. Inline Style
2. Internal Style
3. External Style

1. Inline Style

Inline: combines HTML content with CSS style in one page.

Use the style **attribute** in the relevant tag.

The style **attribute** can contain any CSS property.

```
<p style="color:sienna;margin-left:20px">This is a  
paragraph.</p>
```

Inline stylesheets are considered inefficient. If your website has multiple pages you're styling for each individual page. So if you want a mass change, you'd have to revise the CSS on each individual HTML page.

Example: Inline Styles

We're going to display three paragraphs of text (three p elements) and give them each the same style:

The first CSS property we will use is **font-family**:

```
<p style="font-family: Monaco, Arial, sans-serif;">This is my first paragraph  
of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif;">This is my second paragraph  
of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif;">This is my third, also  
super! exciting!!, paragraph of text.</p>
```

Example: Inline Styles

The second CSS property we will use is **color**:

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue;">This is my  
first paragraph of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue;">This is my  
second paragraph of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue;">This is my  
third, also super! exciting!!,  
paragraph of text.</p>
```

Example: Inline Styles

The third CSS property we will use is **text-align**:

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue; text-align: right;">This is my  
first paragraph of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue; text-align: right;">This is my  
second paragraph of text.</p>
```

```
<p style="font-family: Monaco, Arial, sans-serif; color: blue; text-align: right;">This is my  
third, also super exciting!!, paragraph of text.</p>
```

Now you have more style than content on your page.

Can you see how this is inefficient if you need to make all paragraphs black?

You would have to revise each individual line.

Inline Styles negate the purpose of separating content and presentation.

2. Internal Style

Internal: Defined in the head section of an HTML page using the `<style>` tag.

```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
2
3 <html>
4   <head>
5     <title>Intro to HTML CSS Class 2</title>
6     <style>
7       <!--ALL OF OUR NEW CSS WILL GO HERE-->
8     </style>
9   </head>
10 </html>
```

Could be used when a single html page has a unique style.


Example: Internal Style

Ravelry - a knit and croch x

← → ↻ <https://www.ravelry.com/account/login> ☆ 🔑

📧 Outlook Web App 🌐 New Tab 🌐 WebEx Enterprise Site 📊 CitiDirect® Online B... 📺 SCN SAP Community Ne... » 📁 Other bookmarks

Unique landing page – uses internal style



username:

password:

[I forgot](#) ☐ remember me

Ravelry is a free site for knitters and crocheters.



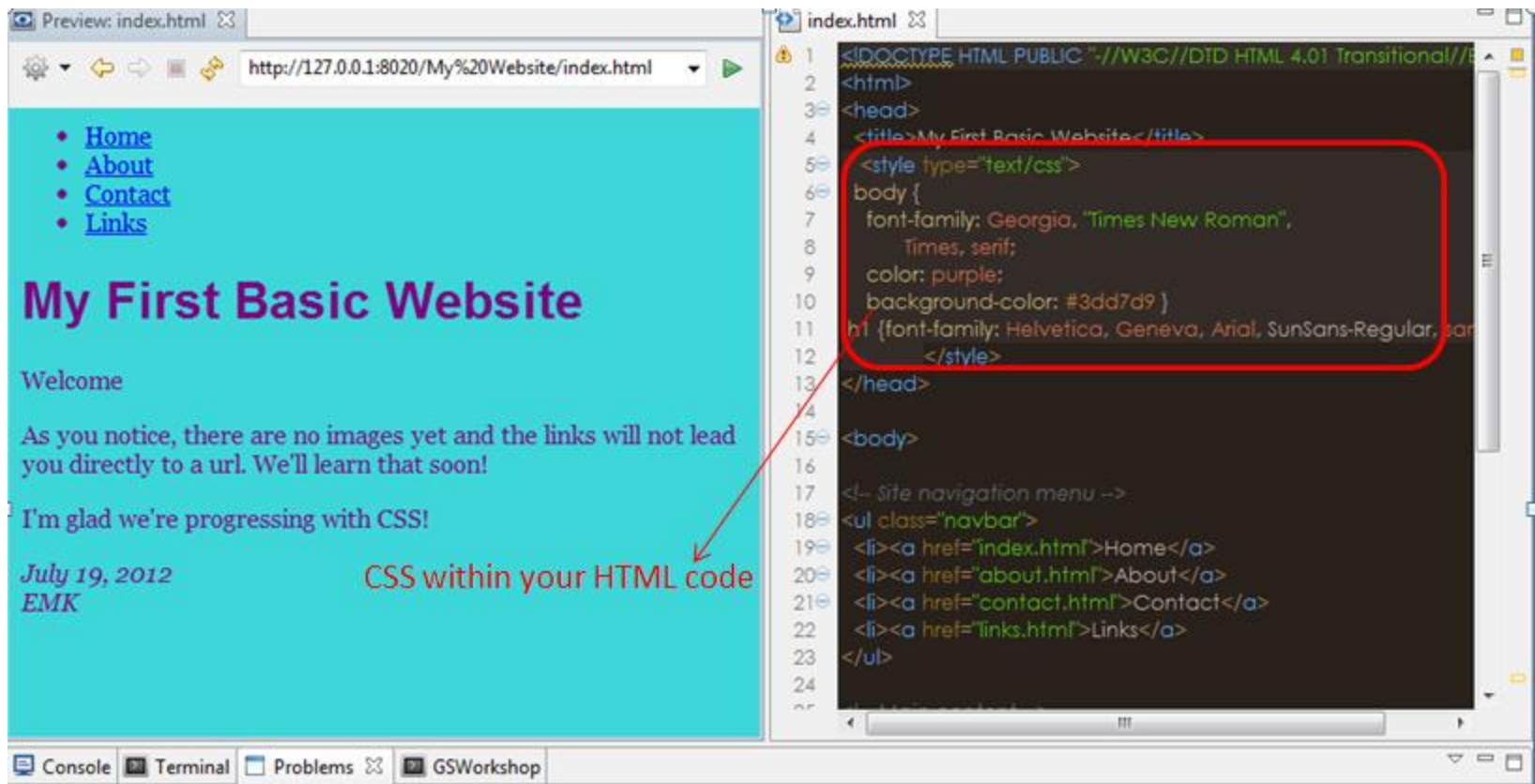
Example: Internal Style

Two column layout – differs from landing page due to styling. Separate CSS than the landing page, saved on a .css file, not written within HTML content



```
<link href="http://style2.ravelrycache.com/stylesheets/ravelry_global_1206151136.css" rel="
"Stylesheet" type="text/css">
<link href="http://style3.ravelrycache.com/stylesheets/ravelry_components_1206131125.css"
rel="Stylesheet" type="text/css">
```

Example: Internal Style



See how the style is incorporated into the html code?
Everything is maintained on one page.

3. External Style

External: Use one CSS file for all your pages.

Saved as a .css file extension.

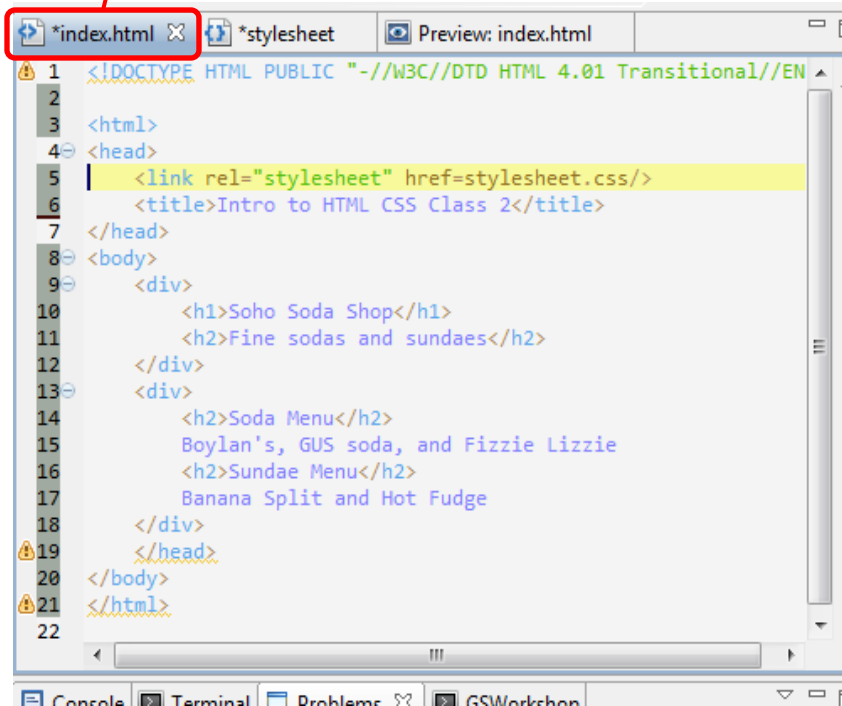
Does not contain html tags but is referenced in your html file.

Ideal for use when style is applied to many pages.

Example: any presence of “Girl Develop It” should show up pink on all pages of our website.

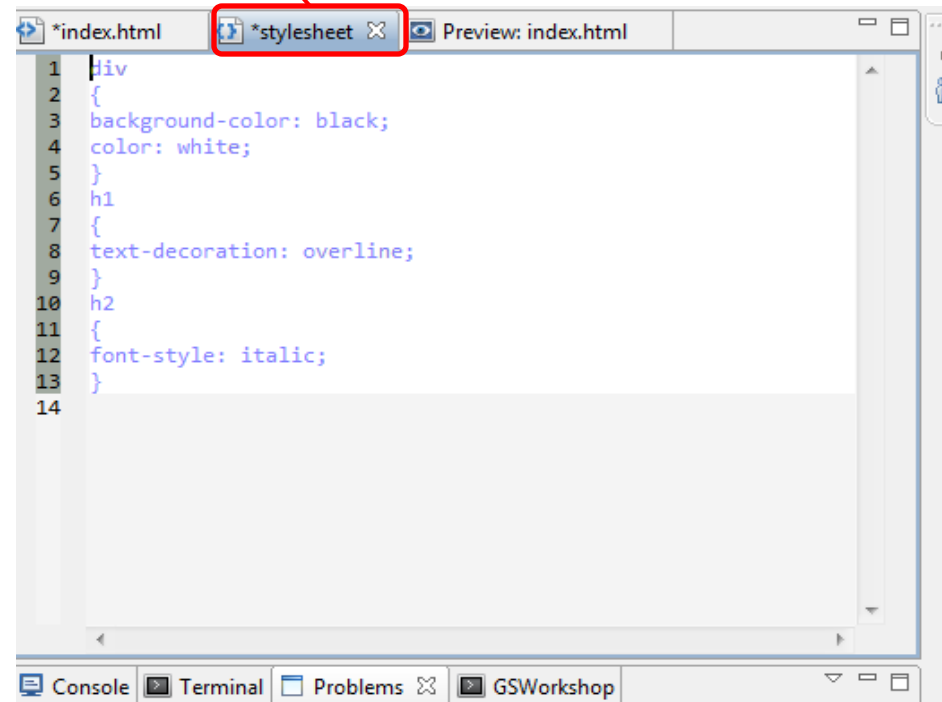
Example: External Style

HTML



```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
2
3 <html>
4 <head>
5   <link rel="stylesheet" href="stylesheet.css"/>
6   <title>Intro to HTML CSS Class 2</title>
7 </head>
8 <body>
9   <div>
10     <h1>Soho Soda Shop</h1>
11     <h2>Fine sodas and sundaes</h2>
12   </div>
13   <div>
14     <h2>Soda Menu</h2>
15     Boylan's, GUS soda, and Fizzie Lizzie
16     <h2>Sundae Menu</h2>
17     Banana Split and Hot Fudge
18   </div>
19 </body>
20 </html>
```

CSS



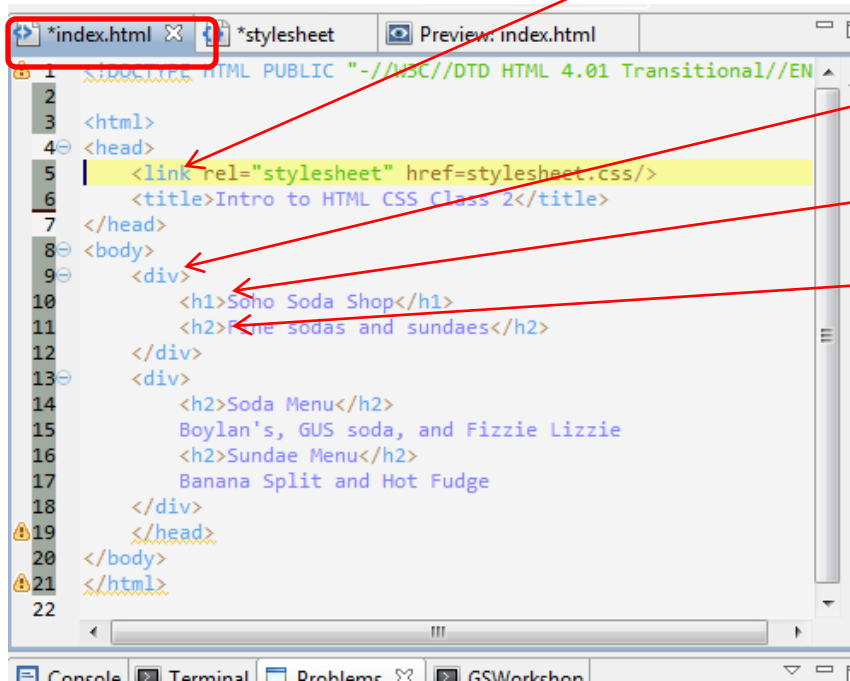
```
1 div
2 {
3   background-color: black;
4   color: white;
5 }
6 h1
7 {
8   text-decoration: overline;
9 }
10 h2
11 {
12   font-style: italic;
13 }
14
```

Selectors

A selector is what links or connects your CSS with a specific HTML element, or set of elements using the `<link>` tag

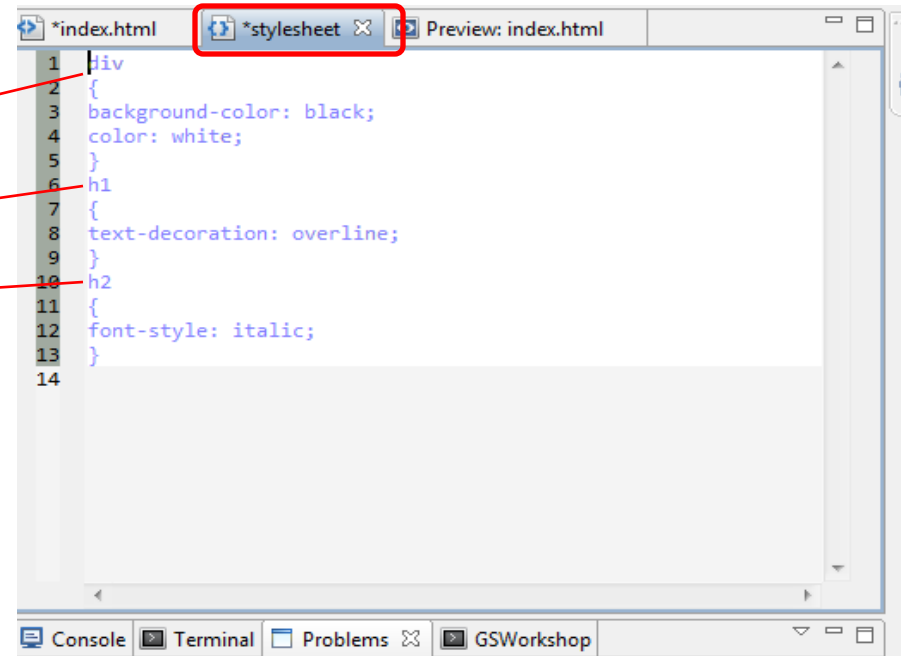
HTML

CSS



This screenshot shows an HTML editor with a file named `*index.html`. The `<link rel="stylesheet" href="stylesheet.css"/>` tag is highlighted in yellow. Red arrows point from this tag to the corresponding CSS file in the adjacent screenshot. The HTML structure includes a `<head>` section with a title and a `<body>` section containing two `<div>` containers. The first `<div>` contains an `<h1>` and an `<h2>`, while the second `<div>` contains two `<h2>` elements with associated text.

```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
2
3 <html>
4 <head>
5 <link rel="stylesheet" href="stylesheet.css"/>
6 <title>Intro to HTML CSS Class 2</title>
7 </head>
8 <body>
9 <div>
10 <h1>Soho Soda Shop</h1>
11 <h2>Fine sodas and sundaes</h2>
12 </div>
13 <div>
14 <h2>Soda Menu</h2>
15 Boylan's, GUS soda, and Fizzie Lizzie
16 <h2>Sundae Menu</h2>
17 Banana Split and Hot Fudge
18 </div>
19 </body>
20 </html>
```



This screenshot shows a CSS editor with a file named `*stylesheet`. It contains CSS rules for a `div` and two `h2` elements. Red arrows point from the `div` and `h2` selectors in the CSS to the corresponding `<div>` and `<h2>` elements in the HTML editor. The CSS rules set a black background and white color for the `div`, an underline for the first `h2`, and an italic font style for the second `h2`.

```
1 div
2 {
3   background-color: black;
4   color: white;
5 }
6 h1
7 {
8   text-decoration: overline;
9 }
10 h2
11 {
12   font-style: italic;
13 }
14
```

Summary: CSS Stylesheets

Inline

Placed directly in the HTML element

No Selector used

Inefficient, only applies to the HTML element

Only recommended if you want to over-ride a style on your internal style sheet

Internal

Placed in the head section of the HTML

Uses the <style> tag

Only applies to the current HTML page

Only recommended if you need to style only one page, or if you want different pages to have varying styles.

External

Saved as a separate .css file, linked to the HTML page

Uses the <link> tag in the <head>tag

Can contain all the styles needed for all pages on the site.

Recommended

Exercise: Creating a separate CSS file

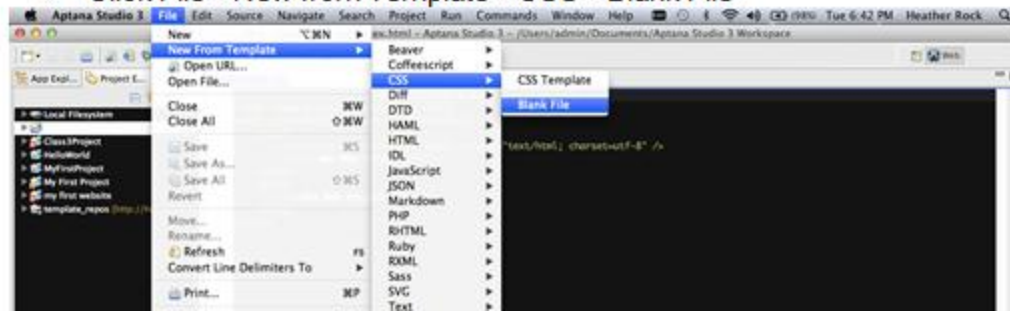
Refer to Class 2 Handout: Adding a CSS Page



Intro to HTML/CSS

Class 2 Handout: Adding a CSS Page

- Now that we have our HTML page, we need to add a CSS page.
 - Click File->New from Template->CSS->Blank File



Reference: Linking HTML file to CSS file

Linking our HTML file to our CSS file

1. We need to link our HTML file to our new CSS file.
2. We do this via the **<link>** element.
 - <link> is a self-closing tag
 - <link> goes in the <head> section of our HTML file.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html401/dtd/html401.dtd">
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html" />
    <title>Golden Seeds HTML/CSS Workshop</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <div id="header">
```

CSS Properties (reminder)

Many CSS properties have self-explanatory names:

- background-color
- font-family
- font-size
- color
- width
- height

Comprehensive list of all CSS properties:

http://w3schools.com/css/css_reference_atoz.asp

CSS Selectors: Types

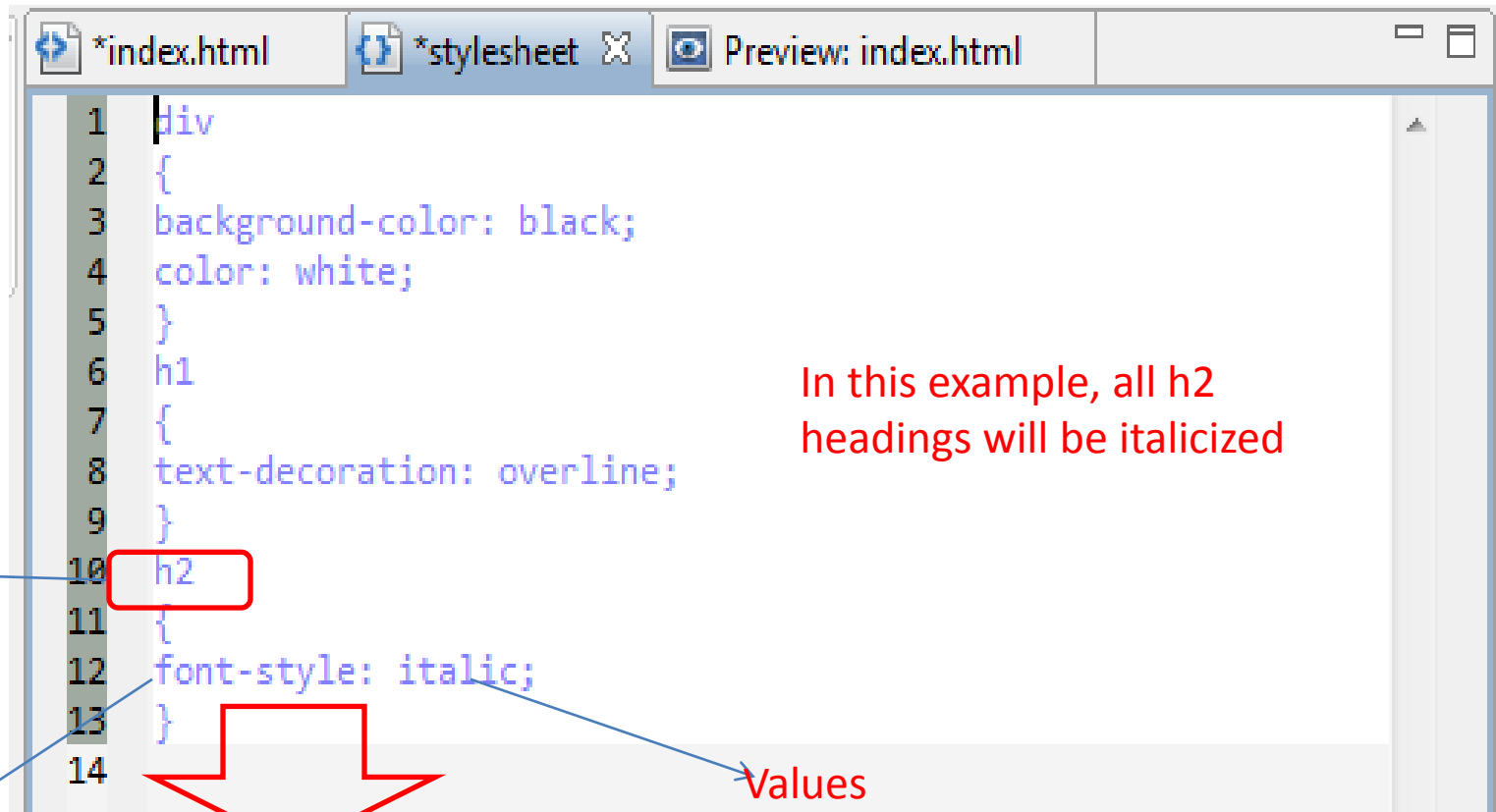
Selectors are one of the most important aspects of CSS as they are used to "select" elements on an HTML page so that they can be styled.

The selector comes before the curly brackets { }

We will cover three kinds of selectors:

1. Element-type selectors (a, body, html)
2. Class selectors
3. id selectors

CSS Selector: Element-type



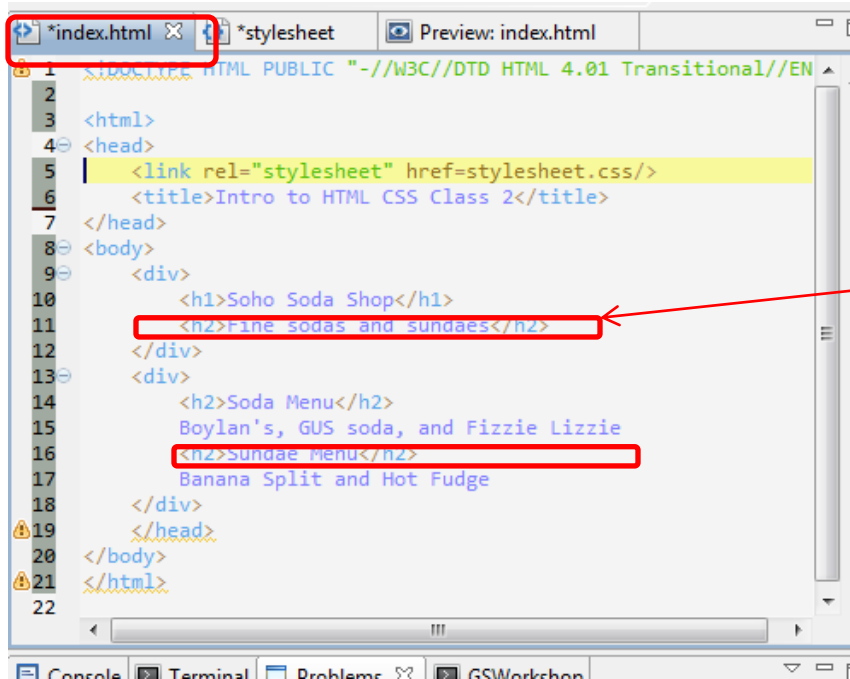
Declaration

Declaration = property: value;

CSS Selector: Element-type

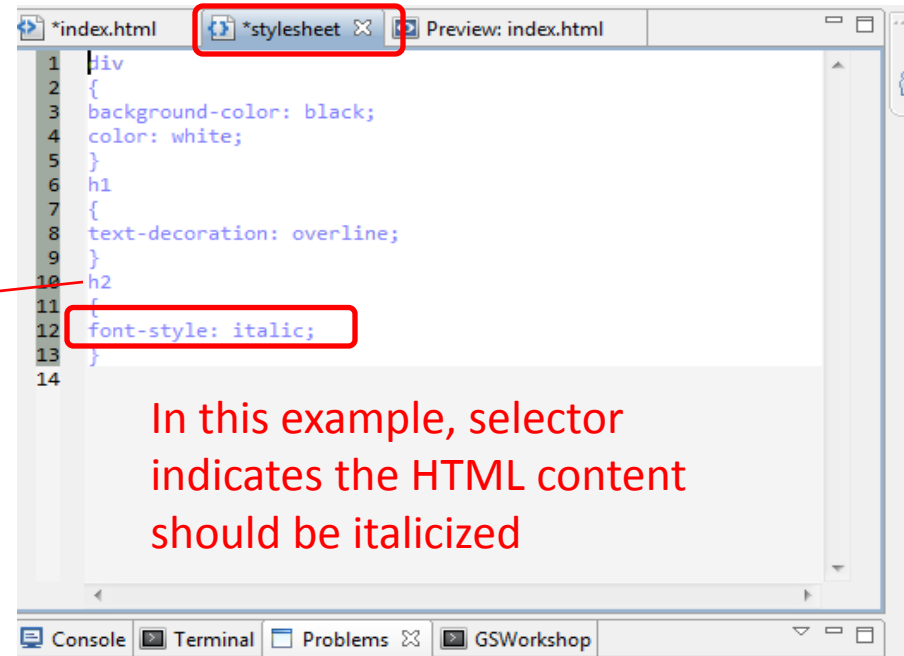
A selector is what links or connects your CSS with a specific HTML element, or set of elements using the <link> tag

HTML



```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
2
3 <html>
4 <head>
5   <link rel="stylesheet" href="stylesheet.css"/>
6   <title>Intro to HTML CSS Class 2</title>
7 </head>
8 <body>
9   <div>
10     <h1>Soho Soda Shop</h1>
11     <h2>Fine sodas and sundaes</h2>
12   </div>
13   <div>
14     <h2>Soda Menu</h2>
15     Boylan's, GUS soda, and Fizzie Lizzie
16     <h2>Sundae Menu</h2>
17     Banana Split and Hot Fudge
18   </div>
19 </body>
20 </html>
```

CSS



```
1 div
2 {
3   background-color: black;
4   color: white;
5 }
6 h1
7 {
8   text-decoration: overline;
9 }
10 h2
11 {
12   font-style: italic;
13 }
14
```

In this example, selector indicates the HTML content should be italicized

CSS Selector: Class

CSS class selectors define the styles for many HTML elements with the same class name.

How does the browser know to look for the blue paragraph?

- The . before the name of the selector tells the browser this is a class selector
- . = class selector

CSS Selector: Class

CSS class selectors let you set “labels” on elements, and style each labeled element differently.

You set these labels in HTML by assigning a class attribute:

Example: with this p style, all paragraphs will have blue text, Monaco font, and aligned to the right.

HTML:

```
<p>this text will be black</p>
<p class="blueParagraph">hi!</p>
<p class="greenParagraph">hellooooo!</p>
```

CSS:

```
<style type="text/css">
  p
  {
    font-family: Monaco, Arial, sans-serif;
    text-align:right
  }
  .blueParagraph
  {
    color: blue;
  }
  .greenParagraph
  {
    color: green;
  }
</style>
```


CSS Selector: id

CSS id selectors define the style for the UNIQUE HTML element with the same id name.

- There should be only one unique id per HTML document.
- How does the browser know to look for **username** and **password** in the id attribute?
- The # before the name of the selector tells the browser # = id selector

CSS Selector: id

#title

ID Selector

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

.first {

Class Selector

```
color : blue;  
}
```

h2 {

Element Selector

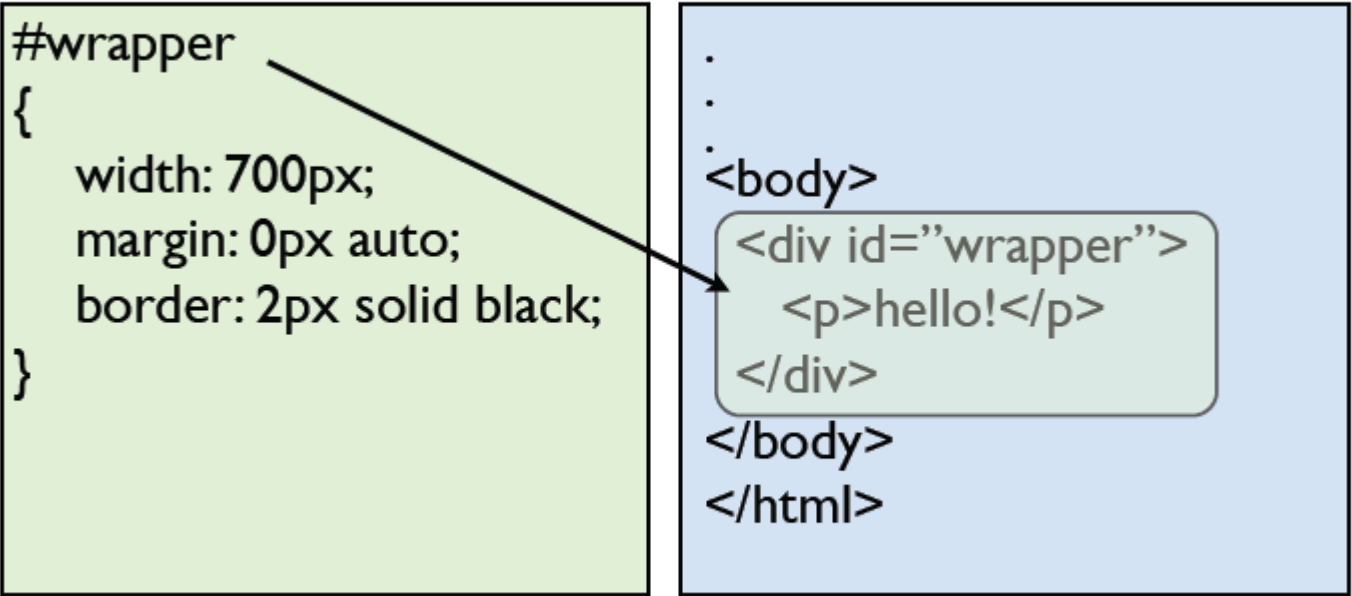
```
color : green;  
}
```

```
<html>  
<head></head>  
<body>  
<h1 id="title"  
class="first">Title!</h1>  
<h2>Hello!</h2>  
<p>test test test...</p>  
<h2  
class="first">Another  
heading!</h2>
```

CSS Selector: id (Example)

```
#wrapper  
{  
  width: 700px;  
  margin: 0px auto;  
  border: 2px solid black;  
}
```

```
.  
.  
.  
<body>  
  <div id="wrapper">  
    <p>hello!</p>  
  </div>  
</body>  
</html>
```



CSS Comments /* */

Just like in HTML, CSS has comments.

Comments are ignored by the browser, but it's a handy way to make notes for yourself.

```
h2
{
    font-size: 12px;

    /* the font size used to be:
       * font-size: 10px; */
}
```

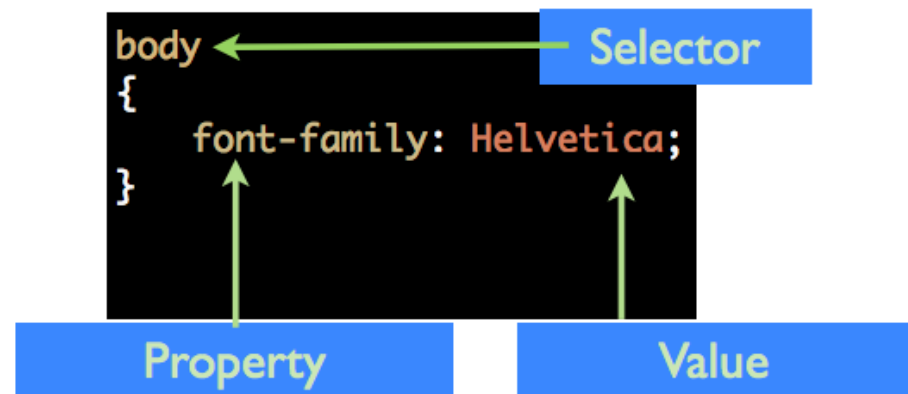
Example: CSS element selectors

Let's put what we just learned to practice.

Inside our css file, we have a body selector and no styles defined.

```
body
{
    font-family: Helvetica;
}
```

Let's add the property font-family and the value Helvetica to add a new default font for our page.



font-family

Adding this to our CSS changes the font for our entire website to **Helvetica** instead of the default (**Times New Roman**).

If you set the font-family property to Helvetica, and Helvetica is not installed on your visitor's computer, it will not work.

The browser will use the default font instead, **Times New Roman**.

Using multiple values with font-family

To specify multiple font types, list them in your order of preference, separated by commas:

```
body
{
    font-family: "Helvetica Neue", Helvetica, Arial, sans-serif;
}
```

If you want to use a font with a multiword name, be sure to put it in quotes.

Back to HTML: div

One html tag we did not cover last week is the div tag:

- The div tag is a great way to apply styles to a bunch of elements all at once. We accomplish this by nesting items within a div.
- We can wrap the two paragraphs in one div element, give that div a class, and style that class! One class instead of two!

Read more at:

http://w3schools.com/tags/tag_div.asp

Back to HTML: div tags

You will often use these spacing properties on div elements.

What if you want a centered design?

- One way to align a whole div element in the center of a page is to set that div to have a specified width, and to have margin: 0 auto

Back to HTML: div tags

What if we want the first 2 paragraphs to be right aligned, but we don't want any other paragraphs to be right-aligned?

We could set them all to a class... but is there an easier, faster way?

Back to HTML: div tags

We can wrap the two paragraphs in one div element, give that div a class, and style that class! One class instead of two!

CSS

```
.alignright
{
    text-align: right;
}
```

HTML

```
<div class="alignright">
    <a href="http://twitter.com">twitter!</a><br/>
    <a href="http://google.com">google!</a><br/>
    <a href="http://amazon.com">amazon!</a><br/>
</div>

<a href="http://girldevelopit.com">GDI!</a><br/>
<a href="http://tumblr.com">tumblr!</a><br/>
```

Exercise: CSS and div

Let's put what we just learned to practice.

Inside your html, nest some of your content in div elements

Add some declarations to your CSS

Text Properties	color text-align text-indent text-transform	h2 {color:red;} p {text-align:left;} p {text-indent: 5px;} h1 {text-transform:uppercase;}
Font Properties	font-family font-size font-weight font-style	p {font-family:veranda,arial;} p {font-size: 12px;} p {font-weight:bold;} h2 {font-style:italic;}
Color & Background Properties	background-color background-image background-repeat color	body {background-image: url(graphic.jpg); color: #FFFFFF; background-color: #000000; }
Hyperlink Colors	a:link a:visited a:hover a:active	a:link {color: #999999;} a:visited {color: #FFFFFF;} a:hover {color: #CCCCCC;} a:active {color: #333333;}

Exercises: Refer to Handout 2



Intro to HTML/CSS Class 2 Handout: CSS Exercises

1. Link CSS

Use the Aptana handout from the first class to create a CSS file for your project called style.css. Link the CSS file to your html by adding the following code to the head of your HTML document:

```
<link rel="stylesheet" href="style.css"/>
```

Homework

Reading:

HTML lists: http://w3schools.com/html/html_lists.asp

Styling lists: http://w3schools.com/css/css_list.asp

Styling links: http://w3schools.com/css/css_link.asp

Class vs Id Selectors: http://css.maxdesign.com.au/selectutorial/advanced_idclass.htm

Time permitting: The Box Model

Three properties are defined by something called the CSS “Box Model”:

- margin
- padding
- border

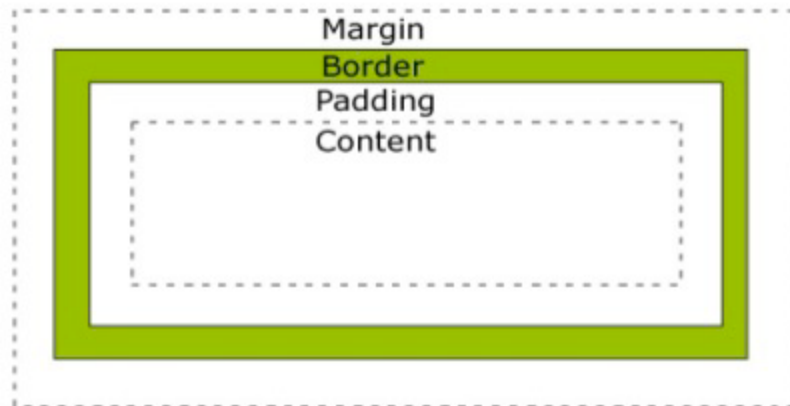
Time permitting: The Box Model

The CSS box model is essentially a box that wraps around HTML elements, and it consists of: margins, borders, padding, and the actual content.

The box model allows us to place a border around elements and space elements in relation to other elements.

The image below illustrates the box model:

Read more at: http://w3schools.com/CSS/css_boxmodel.asp



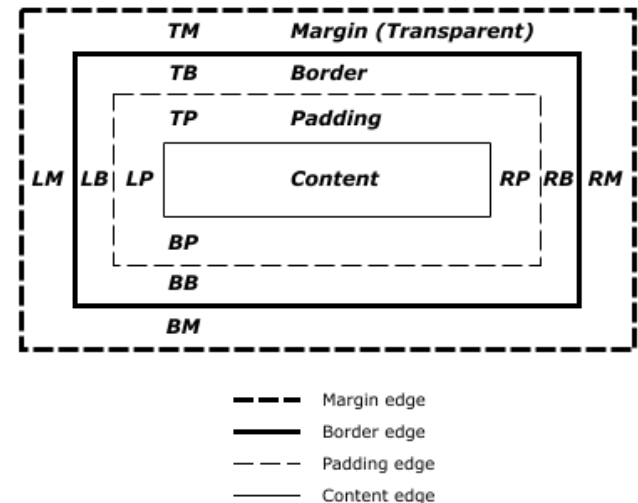
Time permitting: The Box Model

The **content edge** surrounds the rectangle given by the width and height of the box, which often depend on the element's rendered content. The four content edges define the box's content box.

The **padding edge** surrounds the box padding. If the padding has 0 width, the padding edge is the same as the content edge. The four padding edges define the box's padding box.

The **border edge** surrounds the box's border. If the border has 0 width, the border edge is the same as the padding edge. The four border edges define the box's border box.

The **margin edge** surrounds the box margin. If the margin has 0 width, the margin edge is the same as the border edge. The four margin edges define the box's margin box.



Time permitting: The Box Model

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN">
<HTML>
<HEAD>
  <TITLE>Examples of margins, padding, and borders</TITLE>
  <STYLE type="text/css">
    UL {
      background: yellow;
      margin: 12px 12px 12px 12px;
      padding: 3px 3px 3px 3px;
      /* No borders set */
    }
    LI {
      color: white;
      background: blue;
      margin: 12px 12px 12px 12px;
      padding: 12px 0px 12px 12px;
      list-style: none
      /* text color is white */
      /* Content, padding will be blue */
      /* Note 0px padding right */
      /* no glyphs before a list item */
      /* No borders set */
    }
    LI.withborder {
      border-style: dashed;
      border-width: medium;
      border-color: lime;
      /* sets border width on all sides */
    }
  </STYLE>
</HEAD>
<BODY>
  <UL>
    <LI>First element of list
    <LI class="withborder">Second element of list is
      a bit longer to illustrate wrapping.
  </UL>
</BODY>
</HTML>
```

