

WIFI: RestrictedAccess

SLIDES: <http://bit.ly/GDIhtml2>

HTML/CSS Class 2: Intro to CSS

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Agenda

- Review of last week
- Intro to CSS
- The three ways to include styles: inline styles, internal stylesheets and external 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 from last week

- Last week, we reviewed:
 - What HTML is and a little about how it came about.
 - HTML tags, elements and attributes
 - The tags:
 - html, head, title
 - body, p, br, strong, h1-h6
 - HTML tables: table, tr, td, and the colspan attribute

Brief review of terms

Tag

Tags are used to denote the start of an element (i.e. `<p>`) or the end of an element (i.e. `</p>`). A tag is either a start tag or an end tag.

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

Element

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

`<p>This is some paragraph text</p>`

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.
- Examples:
 - 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**.
- <http://www.csszengarden.com/>

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 Monaco font!

CSS is all about style

- 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.

What does CSS look like?

The hallmark of all CSS is the combination of two things:

- A property
 - The property describes what you're trying to change via CSS.
 - For example: **background-color, width, font-size.**
- A value
 - What you want to change the property to.
 - For example: **green, 500px, 24pt.**

Property:Value;

The hallmark of all CSS is the combination of two things:

- A property
- A value
 - We separate the property from the value with a **colon**.
 - We end the value with a **semicolon**.

Property

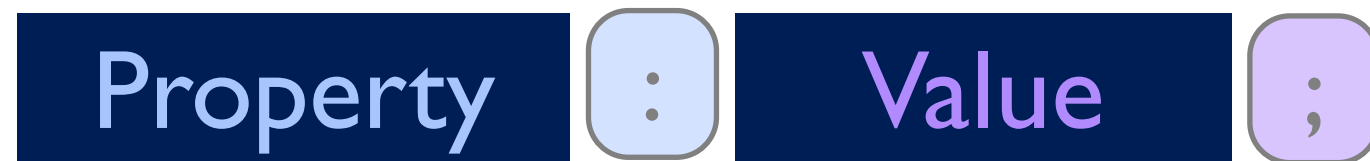
:

Value

;

Property:Value;

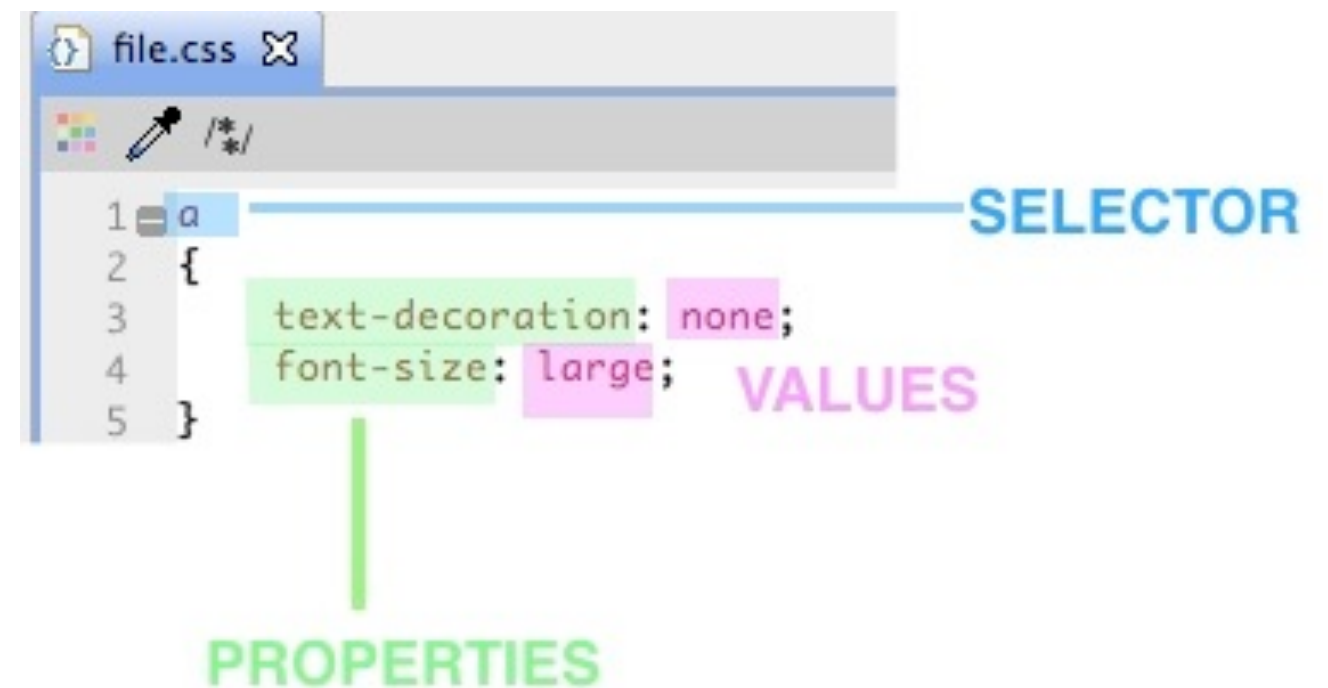
- We separate the property from the value with a **colon**.
- We end the value with a **semicolon**.



- Examples:
 - color: blue;
 - width: 500px;
 - font-size: 24pt;

CSS Properties

- CSS properties are the actual styles you give to your HTML elements.
- Much of learning CSS is about learning which CSS properties you need to use in order to get the formatting or style you want.



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](http://w3schools.com/css/css_reference_atoz.asp)

Three ways to insert CSS

There are three ways to insert styles on an HTML page:

- External Stylesheet
- Internal Stylesheet
- Inline Styles

A stylesheet is simply a document that holds CSS.

Inline Styles

There are three ways to insert styles on an HTML page:

- External Stylesheet
- Internal Stylesheet
- **Inline Styles**

What does inline styles CSS look like?

```
<p style="color:blue;">blah blah blah</p>
```



CSS

This will look in your browser like this:

blah blah blah

Inline Styles

- Inline styles make use of the HTML attribute **style**.
- You add the CSS properties you'd like to modify inside an element's style attribute:
 - `go to twitter`
 - will give us: go to twitter

Inline Styles

- We're going to start with 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>
```

Inline Styles

- Now let's add another style to these three paragraphs of text:

- 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>
```

Inline Styles

- Now let's add another style to these three paragraphs of text:
 - 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>
```

Inline Styles... can be exhausting!

- Is anyone getting a little tired of copy/pasting?
- Is this easy to read?

```
<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>
```

Inline Styles... can be exhausting!

- Isn't there an easier, cleaner way to do this?!

Internal Stylesheets (an easier way)

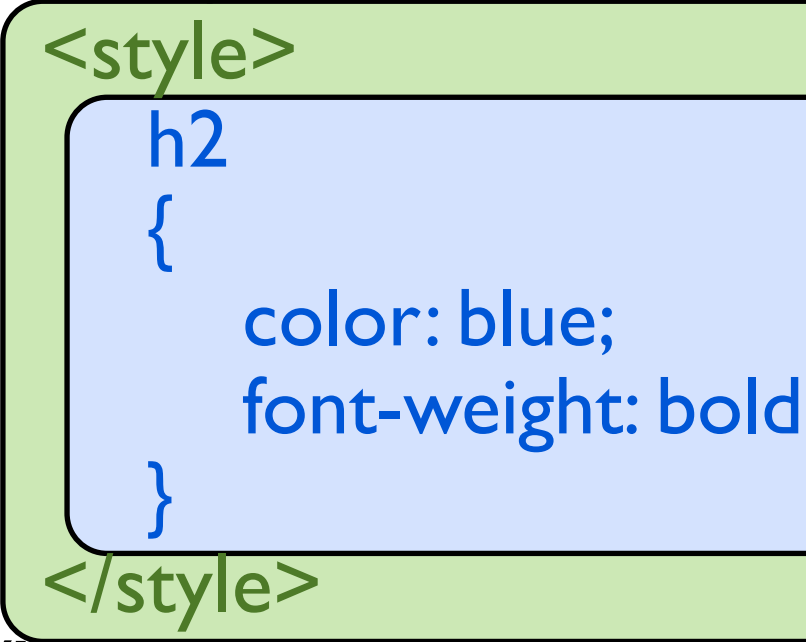
There are three ways to insert styles on an HTML page:

- External Stylesheet
- Internal Stylesheet
- Inline Styles

What do internal stylesheets look like?

You insert your CSS inside a `<style>` element, which lives inside the `<head>` element

```
<html>
<head>
  <title>My online resume</title>
  <style>
    h2
    {
      color: blue;
      font-weight: bold;
    }
  </style>
</head>
<body>
  <h1>My awesome resume!</h1>
</body>
</html>
```



Migrating from inline styles to an internal stylesheet

Instead of:

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

We'll have:

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


Selectors!

If I move everything **out** of my HTML and into an internal stylesheet, how will the browser know which part of the page I want to style?

It knows because of the **selectors** you use.

Selectors!

A selector is what **links** or **connects** your CSS with a specific HTML element, or set of elements.

CSS file:

div

{

background-color: black;

color: white;

}

h1

{

text-decoration: overline;

}

h2

{

font-style: italic;

}

HTML file:

<body>

<div>

<h1>Soho Soda Shop</h1>

<h2>Fine sodas and sundaes</h2>

</div>

<h2>Soda Menu</h2>

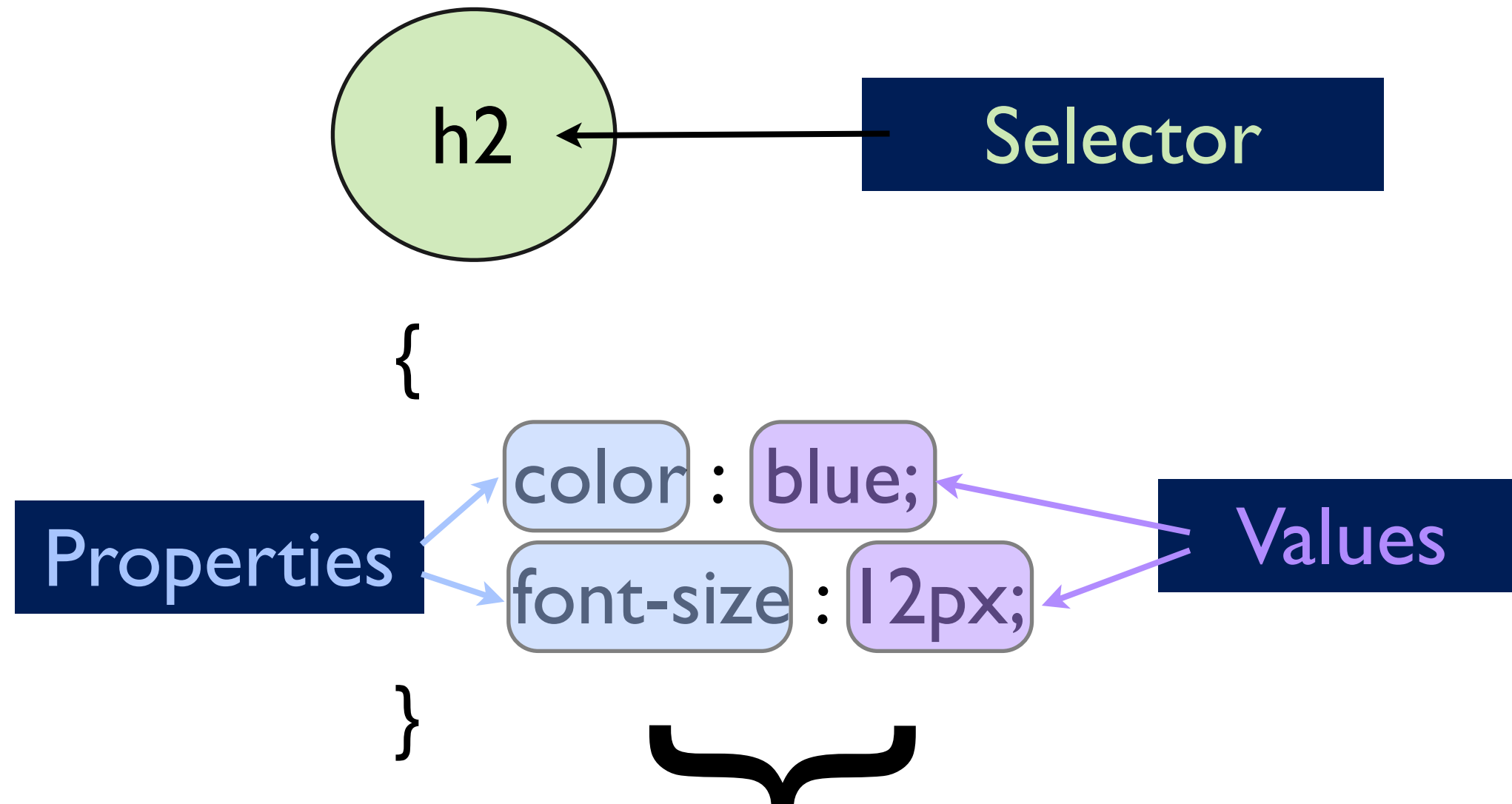
Boylan's, GUS soda, and Fizzie Lizzie

<h2>Sundae Menu</h2>

Banana Split and Hot Fudge

</body>

Internal Stylesheet Syntax



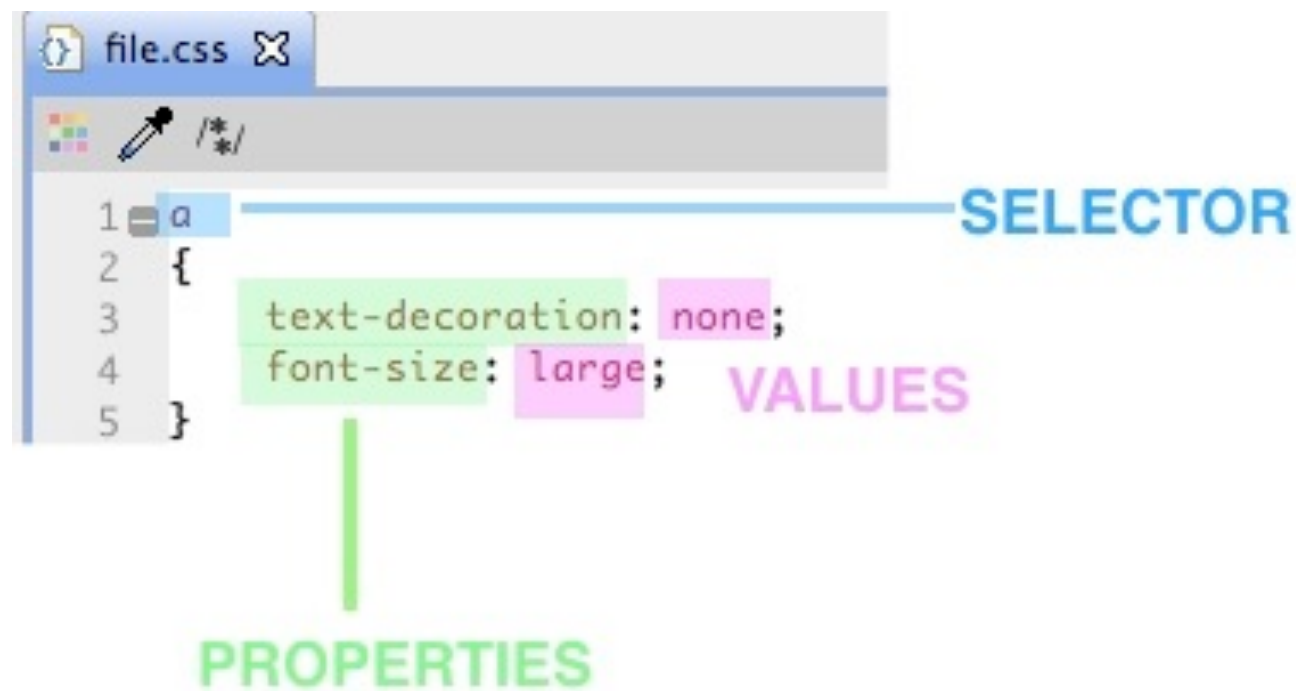
Declaration

Declaration = property: value;

Where are CSS Selectors located?

The selector comes:

- before the curly braces { }



Are there multiple kinds of selectors?

There are three kinds of selectors:

- **element-type** selectors (**a**, **body**, **html**)
 - **class** selectors
 - **id** selectors
-
- We'll be focusing on **element selectors** first.

CSS Element Selectors

h2

Element
Selector

{

color : green;

}

```
<html>
```

```
<head></head>
```

```
<body>
```

```
<h1>Title!</h1>
```

```
<h2>Hello!</h2>
```

```
<p>test test test...</p>
```

```
<h2>Another heading!</h2>
```

Three ways to insert CSS

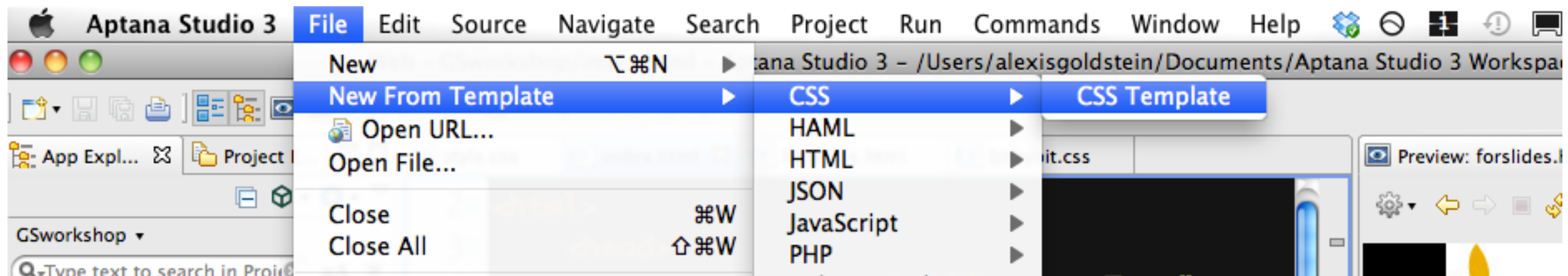
There are three ways to insert styles on an HTML page:

- External Stylesheet
- Internal Stylesheet
- Inline Styles

The most common way is with an External stylesheet, so that is the way we will learn today.

Creating a separate CSS file

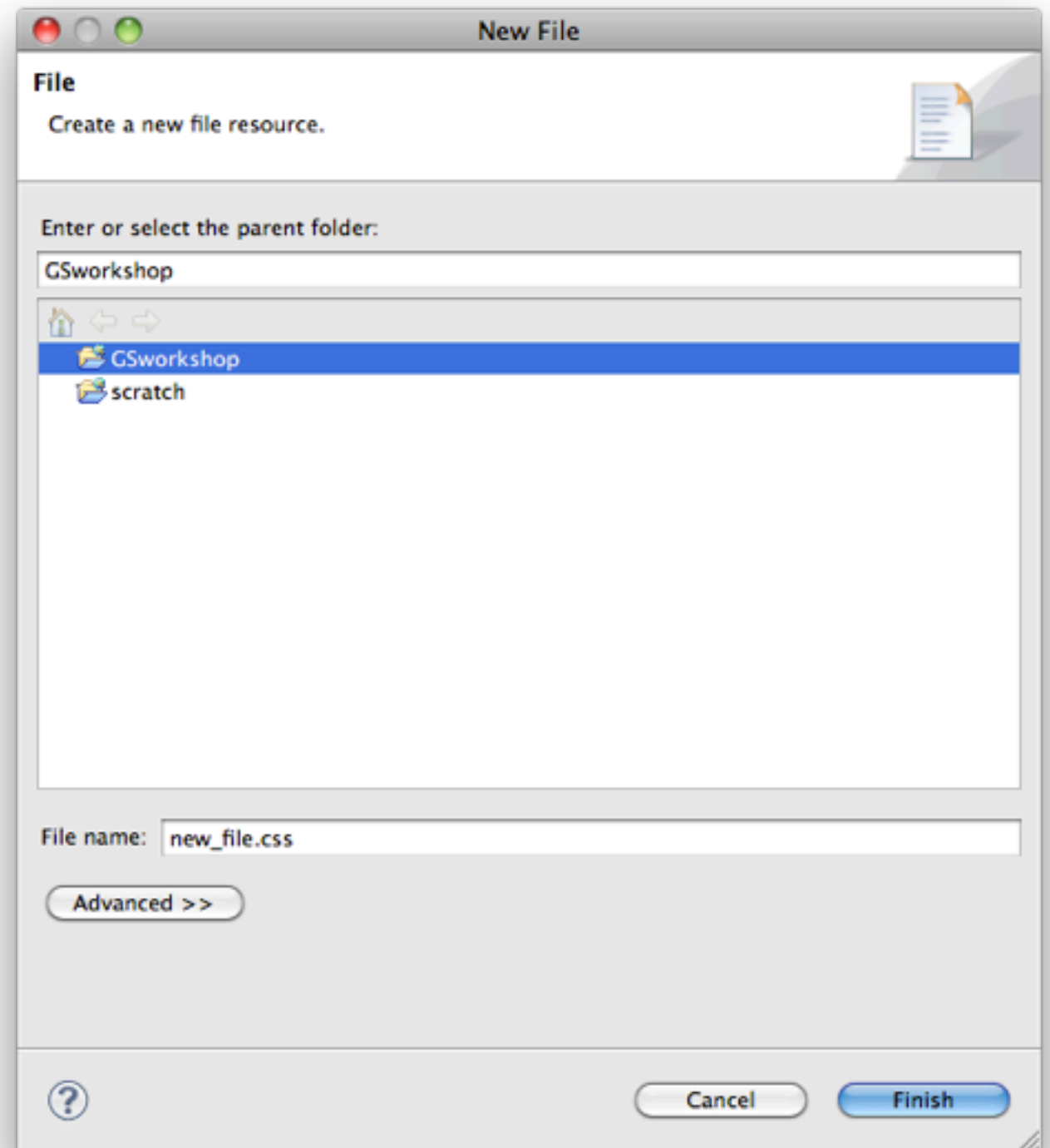
To add a new CSS file to our project, go to **File > New from Template > CSS > CSS Template**



Creating a separate CSS file

A window will open asking you:

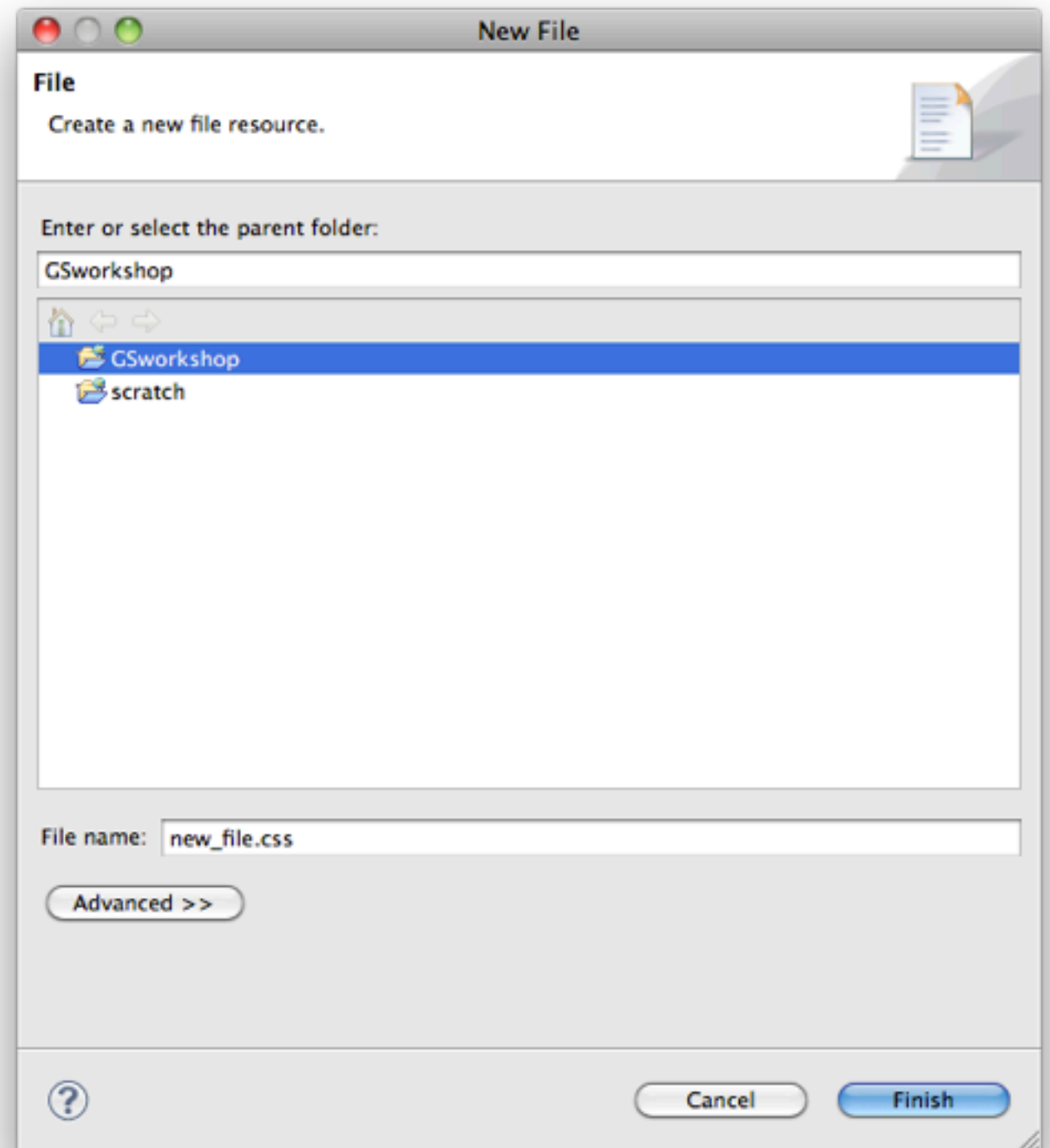
- Which project to add the file to
- What to name the file
 - Make sure you add the new file to the same project you've been working on



Creating a separate CSS file

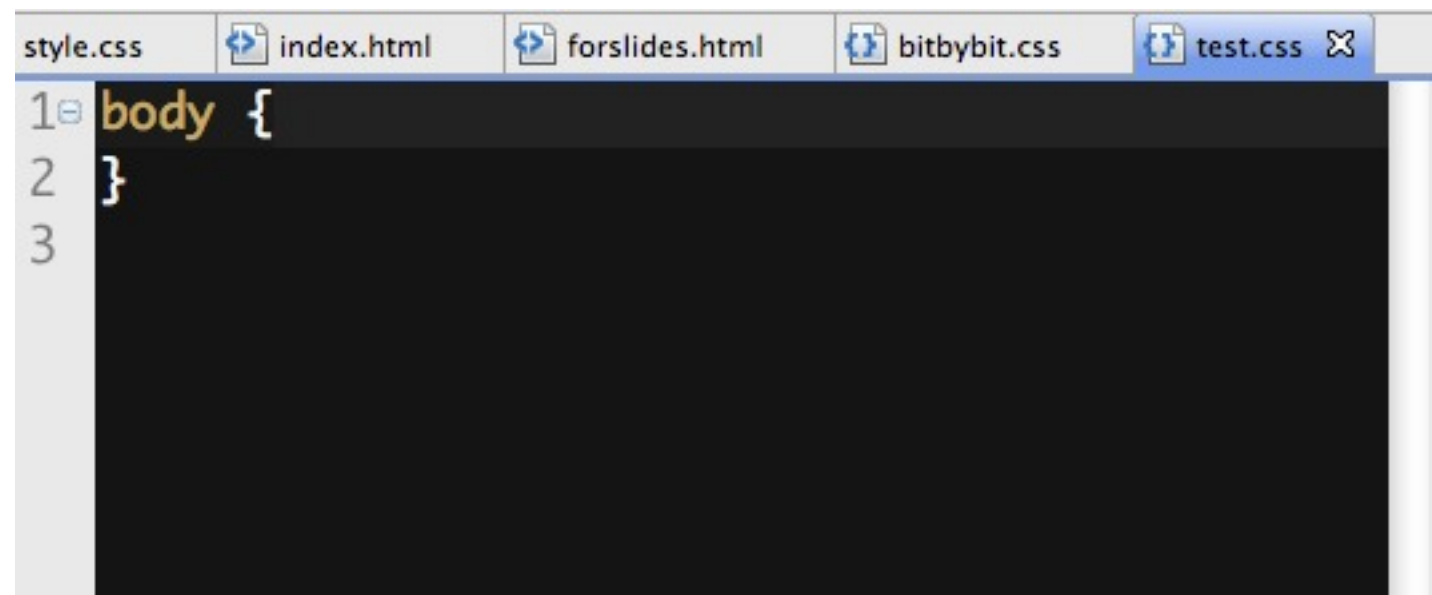
A window will open asking you:

- Which project to add the file to
- What to name the file (I suggest “style.css”)
 - Make sure you add the new file to the same project you’ve been working on



Our new CSS file

Our new CSS file will look like this:



```
1 body {  
2 }  
3
```

The image shows a code editor window with several tabs at the top: style.css, index.html, forslides.html, bitbybit.css, and test.css. The test.css tab is active. The editor area is dark, and the code is written in a light-colored font. The code consists of a single CSS rule for the 'body' selector, which is currently empty, enclosed in curly braces. Line numbers 1, 2, and 3 are visible on the left side of the editor.

Linking our HTML file to our CSS file

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

Linking our HTML file to our CSS file

- We need to link our HTML file to our new CSS file via the **<link>** element.
 - **<link>** requires two attributes, **rel** and **href**.

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

```
<!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">
```

Class Lab

Let's add some more complex CSS to our page from last week.

If you didn't save your page, or you'd like to use the same HTML file I'm using, you can find my HTML here:
<http://jsfiddle.net/yVabk/3/>

Just copy/paste from the HTML section into a new file in your Aptana.

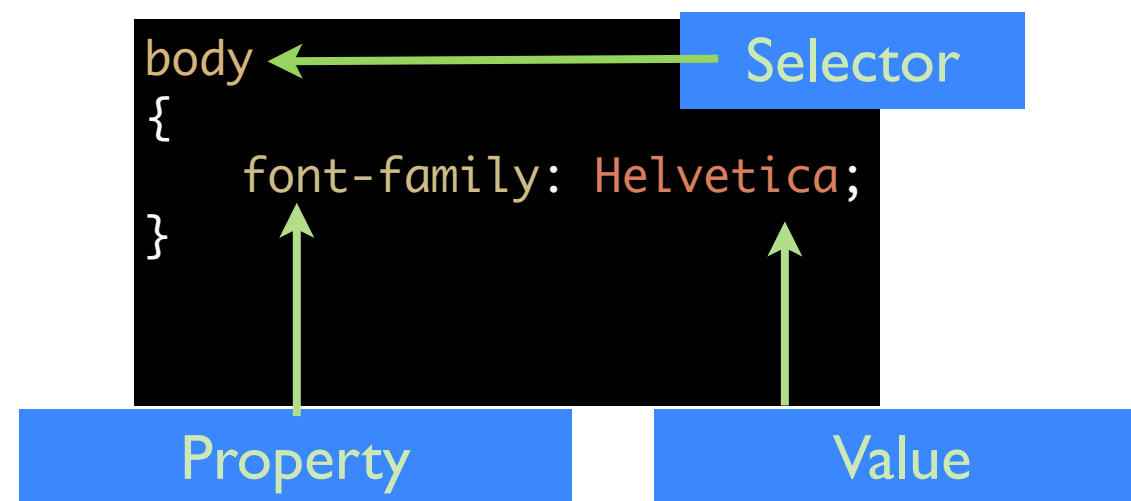
Practicing CSS with the body selector

- Let's put what we just learned to practice.
- Inside our css file, we have a **body** selector and no styles defined.
- Let's add the property **font-family** and the value **Helvetica** to add a new default font for our page.

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

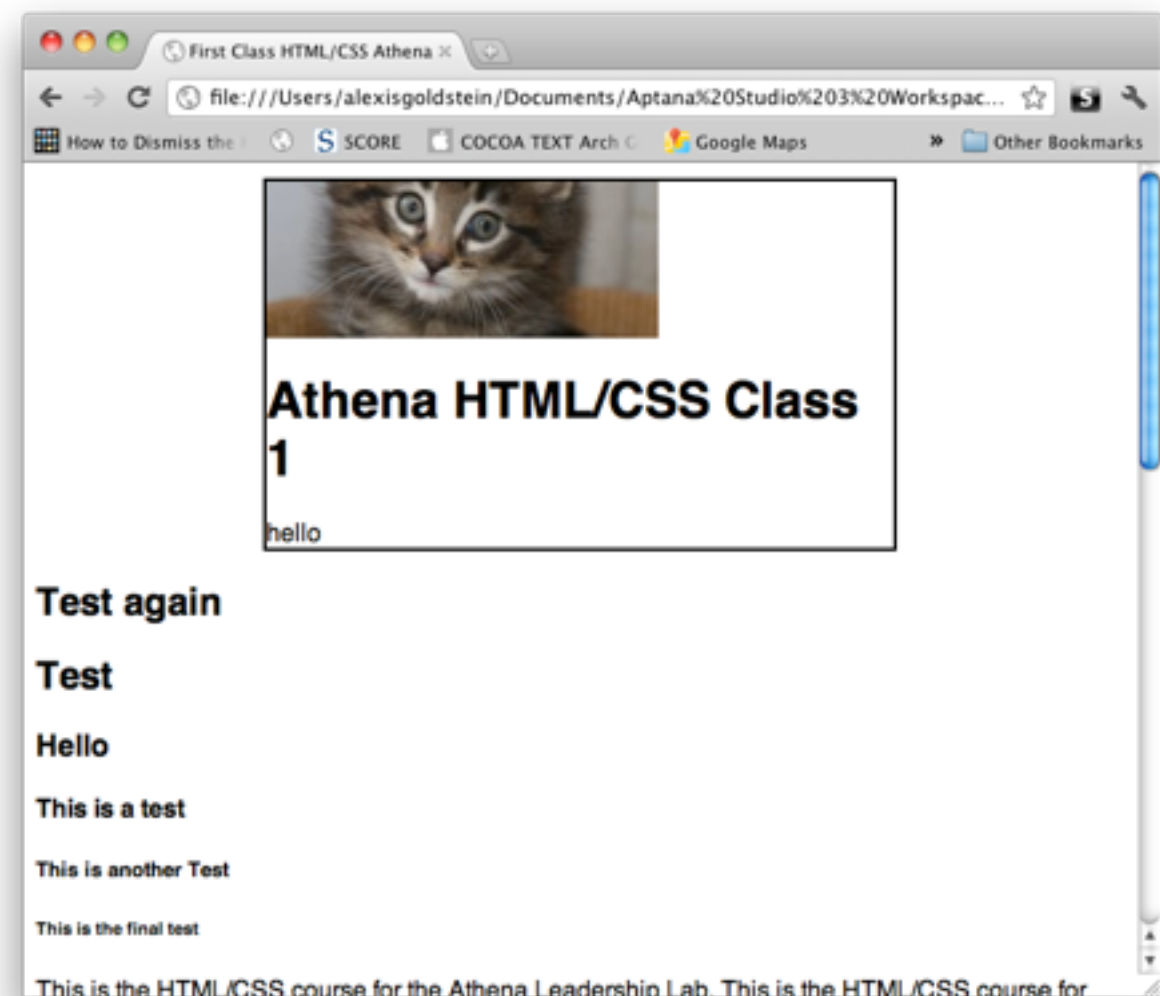
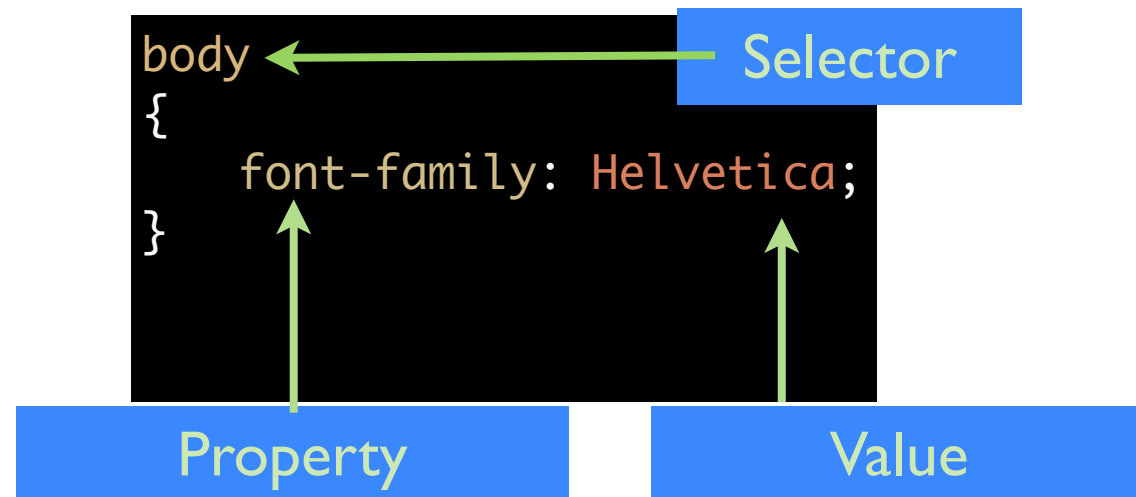
Practicing CSS with the body selector

- Let's put what we just learned to practice.
- Inside our css file, we have a **body** selector and no styles defined.
- Let's add the property **font-family** and the value **Helvetica** to add a new default font for our page.



Practicing CSS with the body selector

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



font-family

- 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 allow you more flexibility, you can specify several font types in the **font-family** property.
- This way, if your visitor doesn't have your first choice font, the browser will try your second and third choice before falling back to 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 multi-word name, be sure to put it in quotes.

More CSS Properties: margin, padding, border

- The next CSS properties we will review are:
 - margin
 - padding
 - border
- These three properties are defined by something called the CSS “Box Model”

The CSS Box Model

margins, borders, padding content



Margin

Border

Padding

Content



Shorthand for padding

- You can define your padding like this:
 - padding-top: 10px;
 - padding-right: 10px;
 - padding-bottom: 10px;
 - padding-left: 10px;
- But they're all 10px... isn't there a faster way to type this out?
 - YES!
 - padding: 10px;

Shorthand for padding

- There are actually three different shortcuts.
- If you give padding one value, it'll apply to all sides:
 - **padding: [all];**
- If you give padding four values, separated by spaces, it'll apply in the following order:
 - **padding: [top] [right] [bottom] [left];**
- If you give two values, it'll apply in this order:
 - **padding: [top & bottom] [left & right];**

Shorthand for margin

- Margin shares the same shortcuts as padding.
- Pedantic way:
margin-top: 10px;
margin-right: 10px;
margin-bottom: 10px;
margin-left: 10px;
- Shortcut ways:
margin: [all];
margin: [top] [right] [bottom] [left];
margin: [top & bottom] [left & right];⁴⁹

CSS Margin: a trick!

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

Class Selectors

What if I want some tags blue and some tags green?

With this new p style, ALL paragraphs will have blue text, Monaco font (if available, otherwise Arial), and be aligned to the right.

```
p
{
    font-family: Monaco, Arial, sans-serif;
    color:blue;
    text-align:right
}
```

What if we want some paragraphs to have green text?

CSS Class Selectors

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

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

```
<p class="blueParagraph">hi!</p>
```

```
<p class="greenParagraph">hellooooo!</p>
```

How do we define this in CSS?

CSS Class Selectors

HTML:

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

CSS:

```
p  
{  
    font-family: Monaco, Arial, sans-serif;  
    text-align:right  
}  
.blueParagraph  
{  
    color: blue;  
}  
.greenParagraph  
{  
    color: green;  
}
```

CSS Class Selectors

.first

Class Selector

{

color : blue;

}

h2

Element Selector

{

color : green;

}

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

Leveraging the div tag with styles

- What if we want the next three links to be right-aligned, but we don't want any other links to be right-aligned?
 - We could set them all to a class... but is there an easier, faster way?

Back to HTML for a moment: 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.
 - Read more at: http://w3schools.com/tags/tag_div.asp

Back to HTML for a moment: div

- We can wrap the three links in one div element, give that div a class, and style that class! One class instead of three!

- 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/>
```

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; */`

`}`

Id Selectors

CSS Id Selectors

- 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?

CSS Id Selectors

- 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.
 - `<p id="blue">hello</p>`

CSS Id Selectors

- 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 this is an **id selector**
- **# = id selector**

CSS Id Selectors

- The # before the name of the selector tells the browser this is an **id selector**
- **# = id selector**
- CSS:
 - `#oneUniqueLink`
{
 text-align: right;
}
- HTML:
 - `google!
`
 - `twitter!
`
 - `amazon!
`

CSS ID Selectors

#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>
```

Id Selector Example

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

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



Nesting Selectors

CSS Nesting

Nesting allows us to target elements that are **nested** inside of other elements

We specify a nested selector by listing it after another “parent” selector, separated by one space:

Nesting lets us to style an element **ONLY** IT it lives within another specific element.

```
div a {
```

```
  color: green;  
  text-decoration: none;
```

```
}
```

In this example, we select any **a** elements that live inside a div element

Pseudoclasses

CSS Pseudoclasses

With pseudoclasses, we can add cool effects to our links.

Each link (the `<a>` element) has four states:

1. link
2. visited
3. active
4. hover

Link States

Each link (the `<a>` element) has four states:

1. link

An unvisited link (a link that has never been clicked).

2. visited

A link that has previously been visited (browsers make these purple by default).

3. active

How the link is styled **in the moment you click it.**

4. hover

How the link is styled **as you hover over it.**

CSS Pseudoclasses

```
a:link
{
    text-decoration: none;
}
```

```
a:hover
{
    text-decoration:
    underline;
}
```

```
<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>
<a href="">I'll be underlined
ONLY when you hover</a>
</body>
</html>
```


Homework

Reading:

- The slides!
- <http://www.htmldog.com/guides/cssbeginner/>
- Class vs Id Selectors: http://css.maxdesign.com.au/selectutorial/advanced_idclass.htm
- http://w3schools.com/css/css_syntax.asp
- http://w3schools.com/css/css_boxmodel.asp

Lab:

- Please create a basic HTML resume page for yourself, with links to a PDF of your resume, your linked in, your blog. Use the files in this zip as a skeleton: <http://livetotry.com/GDI/homework2.zip>
- Use CSS to style: the background, your links (make the text and color differ from the main text), and at least three div elements in the page.