



HTML 1

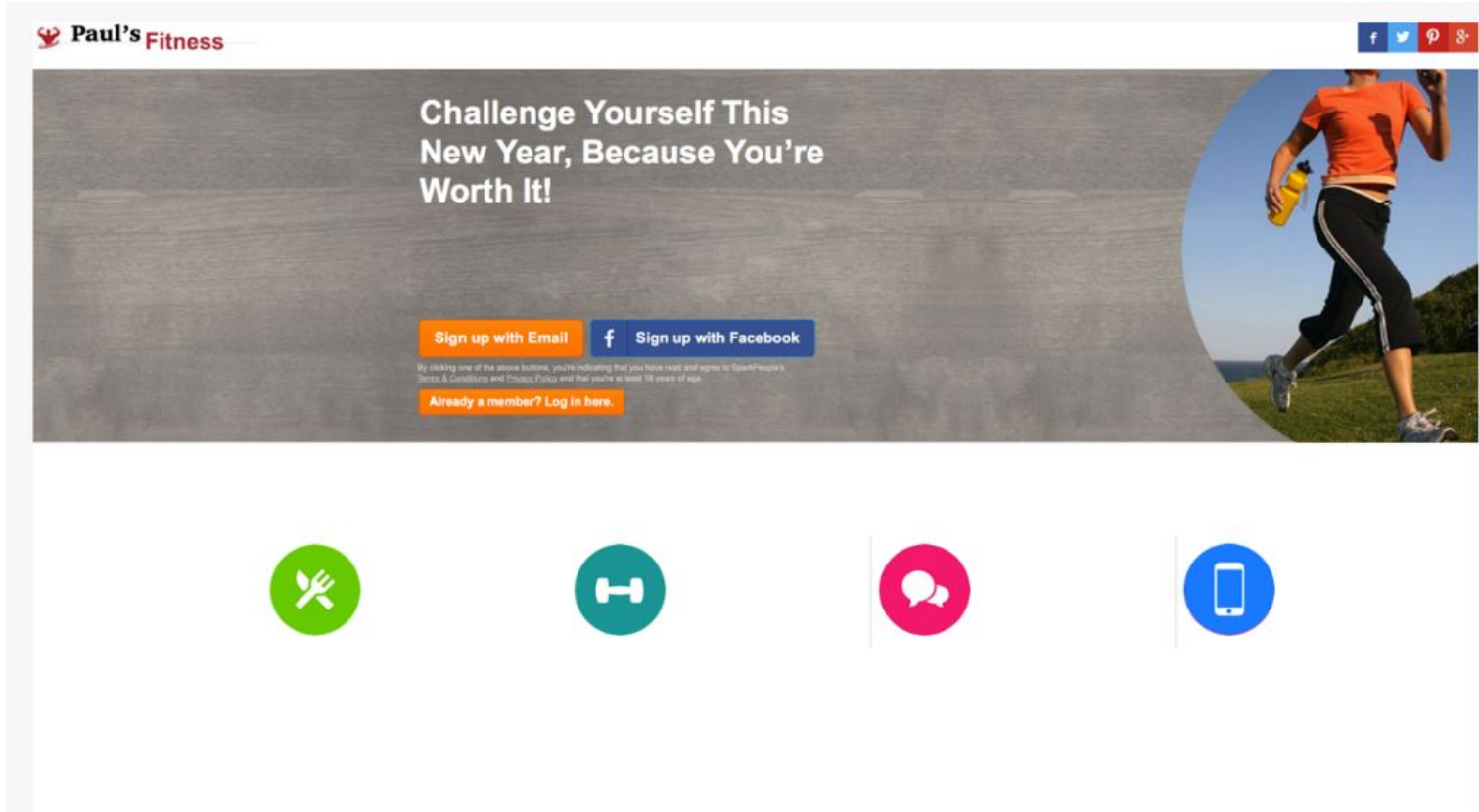
Prep Work

- Finish Fitness and/or Photoshop Exercises
- Watch YouTube Video on Photoshop
- Practice Photoshop Tools

Today's Class

- ▣ Project Review from Last Class
- ▣ Intro To HTML Syntax and Concepts
- ▣ Headings, Text Formatting, and Page Layouts
- ▣ HTML Lists
- ▣ Inserting Comments, Links, and Images
- ▣ Tables Continued
- ▣ Grouping -HTML 5 and Divs
- ▣ Recreate the HTML structure of some sample pages

Photoshop/ Web Exercise



Terms and Info

- HTML is **Hyper Text Markup Language**
- HTML is the building block of all web sites
- Web browsers read HTML and display your website content
- Made up of tags which format the content of your web page
- Saved as .html or .htm files and viewed through a browser
- Where you place files matters (**Folder and File Names/Locations**)

Previous In-Class Exercises

- The `<table>` tag is used to add data to a web page.
- A table is drawn out row by row. Each row is created with the `<tr>` tag.
- Inside each row there are a number of cells represented by the `<td>` tag (or `<th>` if it is a heading for a column).
- You can make cells of a table span more than one row or column using the `rowspan` and `colspan` attributes.
- You can split the table into a `<thead>`, `<tbody>`, and `<tfoot>` for longer tables. This allows you to style each section differently through CSS.

Syntax

Table 1

```
<table border="1">
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
```

Table 2 - With Heading

```
<table border="1">
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Cost</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$50</td>
  </tr>
</table>
```

Table 3 - With Caption and Heading

```
<table border="1">
  <caption>Monthly savings</caption>
  <tr>
    <th colspan="2">Month</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$50</td>
  </tr>
</table>
```

How Websites are Created

```

<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8" />
<title>Lamborghini jQuery Slideshow</title>
<link href="style.css" rel="stylesheet" />
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.4.4/jquery.min.js"></script>
<script src="js/jquery.scrollTo.js"></script>
<script src="js/jquery.localscroll.js"></script>
<script src="js/scripts.js"></script>
</head>

<body>
<div id="slideshow">
  <ul>
    <li id="lambo1"><a href="#"></a></li>
    <li id="lambo2"><a href="#"></a></li>
    <li id="lambo3"><a href="#"></a></li>
    <li id="lambo4"><a href="#"></a></li>
    <li id="lambo5"><a href="#"></a></li>
  </ul>
</div>
<div id="slideshow-nav">
  <ul>
    <li><a href="#lambo1">See the green Lamborghini</a></li>
    <li><a href="#lambo2">See the white Lamborghini</a></li>
    <li><a href="#lambo3">See the grey Lamborghini</a></li>
    <li><a href="#lambo4">See the green Lamborghini</a></li>
    <li><a href="#lambo5">See the yellow Lamborghini</a></li>
  </ul>
</div>
</body>
</html>

```

Link to CSS stylesheet

Links to jQuery library and various plugins

List of linked images inside 'slideshow' div

Navigation list links to relevant ID of each slide

Descriptive anchor text will be replaced by a circular button

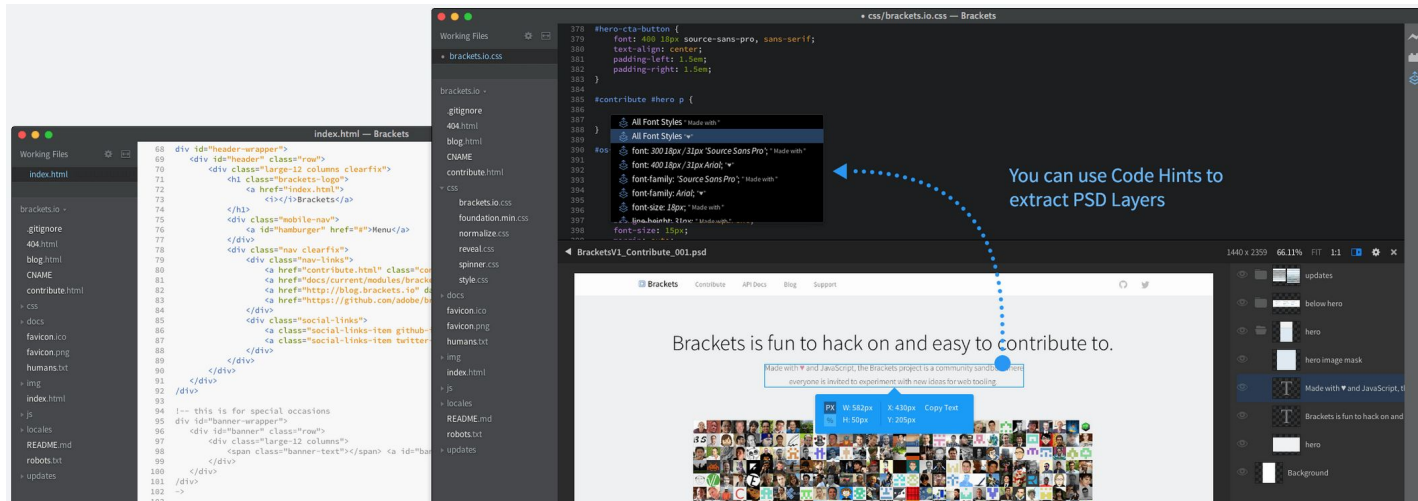
Tools of the Trade (Review)

Developers usually write code in an IDE (integrated development environment)

- ❑ Sublime Text
- ❑ Brackets
- ❑ Visual Studio Code

You need a way to get the code to and from the server

- ❑ FTP
- ❑ SSH
- ❑ Version Control





HTML

Terminology and Syntax

HTML elements - An element usually consists of an opening tag (`<element_name>`), a closing tag (`</element_name>`), which contain the element's name surrounded by angle brackets, and the content in between:

```
<element_name>...content...</element_name>
```

HTML tags label pieces of content such as "heading", "paragraph", "table", and so on

Browsers do not display the HTML tags, but use them to render the content of the page

Examples:

- ❑ The `<!doctype html>` declaration defines this document to be HTML5
- ❑ The `<html>` element is the root element of an HTML page
- ❑ The `<head>` element contains meta information about the document
- ❑ The `<title>` element specifies a title for the document
- ❑ The `<body>` element contains the visible page content
- ❑ The `<h1>` element defines a large heading
- ❑ The `<p>` element defines a paragraph

Doctype and Other Beginning Page Declarations:

- ▣ Starts a document opening and declares it is an HTML document
- ▣ Previously used to define language, markup, type of HTML etc.
- ▣ HTML 5 has streamlined it to one declaration for doctype

`<!doctype html>`

`<html lang="en">` Defines the native language of the document. Declaring a language is important for accessibility applications (screen readers) and search engines:

`<meta charset="utf-8">` Defines the encoding type for the document and is placed in between the `<head></head>` tags. To display an HTML page correctly, a web browser must know the character set used in the page.

Other:

Another item that can go between the `<head></head>` and `<script></script>` tags is pointing to a library that will allow HTML5 support for older browsers like Internet Explorer

`<script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>`

This link will be sure that older browsers will render the HTML 5 properly if it is not supported

Basic Page Layout

"Hello World"

```
<!doctype html>
<html lang="en">
<head>

    <title>Page Title</title>
</head>

<body>
    <h1>Hello World!</h1>
</body>
</html>
```

Syntax

HTML Identifies Types of Content, Meaning, and Groups it Semantically

`<blockquote></blockquote>` More specific way to represent group of content

`<h1></h1>` - Section Heading, creates a new section of a page but do not group content and is used to describe the topic they precede

`<p></p>` - Paragraph information - most basic element to group content

Structure of an HTML document can be viewed as a series of sections and subsections, like a document outline. This sectioning helps with searching and rendering of the page.

Block-level Elements

A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

The `<div>` element is a block-level element.

Examples of block-level elements:

- `<div></div>`
- `<h1></h1>` - `<h6></h6>`
- `<p></p>`
- `<form></form>` tag is used to create an HTML **form** for user input.

Inline Elements

An inline element does not start on a new line and only takes up as much width as necessary.

Examples of inline elements:

- `` used for **grouping** and applying CSS styles to inline elements.
- `<a>`
- `` <http://www.htmlhelp.com/reference/wilbur/overview.html>
- ``

HTML

Block Level Elements

Headings, Paragraphs, Page, and Line Breaks

Headings can be used to describe the topic they precede and they are defined with the `<h1>` to `<h6>` tags.

`<h1>`This is a Level 1 Heading or Headline`</h1>`

`<h2>`This is a Level 2 heading or Headline`</h2>`

`<h3>`This is a Level 3 heading or Headline`</h3>`

`<h4>`This is a Level 4 Heading or Headline`</h4>`

`<h5>`This is a Level 5 Heading or Headline`</h5>`

`<h6>`This is a Level 6 Heading or Headline`</h6>`

`<p>`This is a paragraph.`</p>`

`<hr />` Horizontal Rule, Section Break or Line

`
`Break to Next Line

`<p>`

This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.

`</p>`

`<p>`

This paragraph
contains a lot of spaces
in the source code,
but the browser
ignores it.

`</p>`

HTML

Formatting Quotes and Abbreviations

```
<q>Quote</q>
```

```
<blockquote cite="http://www.yahoo.com">
```

This is a quote from Yahoo!...indented

```
</blockquote>
```

```
<p>
```

Text below the block quote...

```
</p>
```

```
<p>
```

```
<cite>
```

A Brief History in Time...

```
</cite></p>
```

```
<p><abbr title="Professor">Prof</abbr>Abbreviated  
title
```

```
</p>
```

```
<p><acronym title="National Aeronautics and Space  
Administration">NASA</acronym>does space stuff.
```

```
</p>
```

The `<acronym>` tag is not supported in HTML5 must
use `<abbr></abbr>`.

Text-Level Elements

HTML Formatting

``Bold-Does not stress importance``
`<i>`Italics`</i>`

On the 4`^{`th`}` of the month!
Amount of CO`_{`2`}` in the air!

Whitespace is irrelevant and the browser adds spacing before and after then removes any extra spacing when displaying the page.

`<p>`This is a paragraph.`</p>`

Semantic Elements and Emphasis

``Used to stress importance``
``emphasized text``

`<small>`Reduces Text Size`</small>`

***Note:** Browsers display `` as ``, and `` as `<i>`. However, there is a difference in the meaning of these tags: `` and `<i>` defines bold and italic text, but `` and `` means that the text is "important".*

HTML

Formatting Addresses: (Block Level Element)

```
<address>
```

```
<p>
```

```
8995 N Military Trail, Suite 303B<br />
```

```
Palm Beach Gardens, FL
```

```
</p>
```

```
</address>
```

Strikethrough and Insert Text:

```
<p>This is the<del>worst</del><ins>best</ins> idea!</p>
```

```
<p>can also use<s>strike-through</s></p>
```

HTML

Listing Items on a page

- Ordered lists use numbers
- Unordered lists use bullets
- Definition lists are used to define terminology
- Lists can be nested inside one another
- Block Level Elements

HTML

Unordered Lists

```
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>
```

Ordered Lists

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

Roman Numerals:

```
<ol type="I">
  <li>Caesar</li>
  <li>Brutus</li>
  <li>Octavius</li>
</ol>
```

Nested Lists

```
<ul>
  <li>Coffee</li>
  <li>Tea
    <ul>
      <li>Black tea</li>
      <li>Green tea</li>
    </ul>
  </li>
  <li>Milk</li>
</ul>
```

Definition Lists

```
<dl>
  <dt>Sushi</dt>
  <dd>Sliced raw fish served on
rice</dd>

  <dt>Sashimi</dt>
  <dd>Sliced raw fish that is served
with condiments such as shredded
daikon radish or ginger root, wasabi
and soy sauce</dd>
</dl>
```

HTML

Comments: can be used to leave notes to yourself or other developers about a specific point in code.

General Comment:

```
<!-- This is a comment -->
```

Surrounding Content

```
<!-- Begin Main Content-->
```

```
<!-- End Main Content -->
```

Comment out code for debugging:

```
<!--  -->
```

Comment version support:

```
<!--[if IE 8-->
```

```
.... some HTML here ....
```

```
<![endif]-->
```

HTML

Anchor and Hyperlinks

You will commonly come across the following types of links:

- Links from one page to another on the same website (Relative)
- Links from one website to another out on the internet (External)
- Links that start up your email program and address a new email to someone (Mail client)
- Links from image in a web page (Image)
- Links from one part of the web page to another part of the same page (Inside the same page) Uses ID `Top of Page`
- Links that open in a new browser window (Target) `target="_blank"`

HTML

- Links are created using the `<a>` tag.
- The `<a>` tag uses the `href` attribute to indicate the location, page or destination you are linking to.
- If you are linking to a page within your own site, it is best to use **relative** links rather than fully qualified/absolute URLs.
 - You use the `id` attribute to target elements within a single page that can be linked to.
- You can create links to open email programs with an email address in the "to" field.

HTML

- Relative Link- (Uses File Name)

```
<a href="about.html">About Us Page</a>
```

- External (Absolute) -Link & Opening A New Window- (Uses URL)

```
<a href="http://www.w3schools.com/" target="_blank">Visit W3Schools!</a>
```

Target specifies where to open the link (window, tab, etc)

- Linking an Image- (Uses image instead of text to click on)

```
<a href="default.html">  
    
</a>
```

- Mail To Link- (Uses Mail Client)

```
<a href="mailto:jon@example.com">Email Jon</a>
```

- Link Inside A Page- (Scrolls Content to top)

```
<h1 id="top">This is my Top line</h1>
```

Other HTML headings, content, and Paragraphs here, ...lots of content!

```
<a href="#top">Top of Page</a>
```

Folder Paths

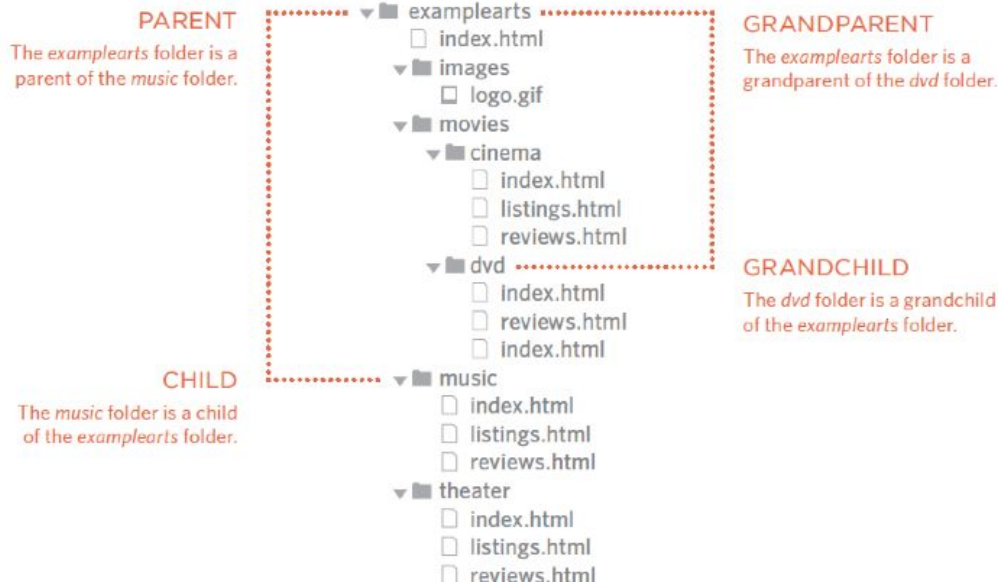
"Pay attention to folder/file paths"

`` Drill down one folder (images)

`` Drill down two folders (css -> icons)

`` Up one directory

`` Up two directories



HTML

Images

 attributes

- **src** - Location (URL) or (PATH) of image (required)
- **alt** - Description of the image if it doesn't display (optional but recommended)
- **title** - tooltip (mouseover) with more information about the image
- **height** - specifies height in pixels by default
- **width** - specifies width in pixels by default

Note: Always specify the width and height of an image. If width and height are not specified, the page will flicker while the image loads.

HTML

WIDTH AND HEIGHT

```

```

ALIGN RIGHT

```

```

TOP ALIGN

```

```

EXTERNAL

```

```

Image with Caption

```
<figure>  
  
<br />  
<figcaption>This is a smiley face</figcaption>  
</figure>
```

HTML

Maps

An image map is an image with clickable areas that usually act as hyperlinks.

The image is defined by the `` tag, and the map is defined by a `<map>` tag with `<area>` tags to denote each clickable area. Use the `usemap` and `name` attributes to bind the image and the map.

```

<map name="shapes">
  <area shape="polygon" coords="79,6,5,134,153,134">
  <area shape="rectangle" coords="79,6,115,234">
  <area shape="rectangle" coords="79,6,115,234">

</map>
```

HTML

3 Methods For Front End Layouts

- HTML Tables (older method uses cells for grouping data elements together)
- Divs (boxes used for grouping HTML elements together)
- HTML5 Semantic Grouping /Sectioning (larger boxes used for grouping HTML elements together)

HTML

Tables

Tabular Data Layout

HTML Tables

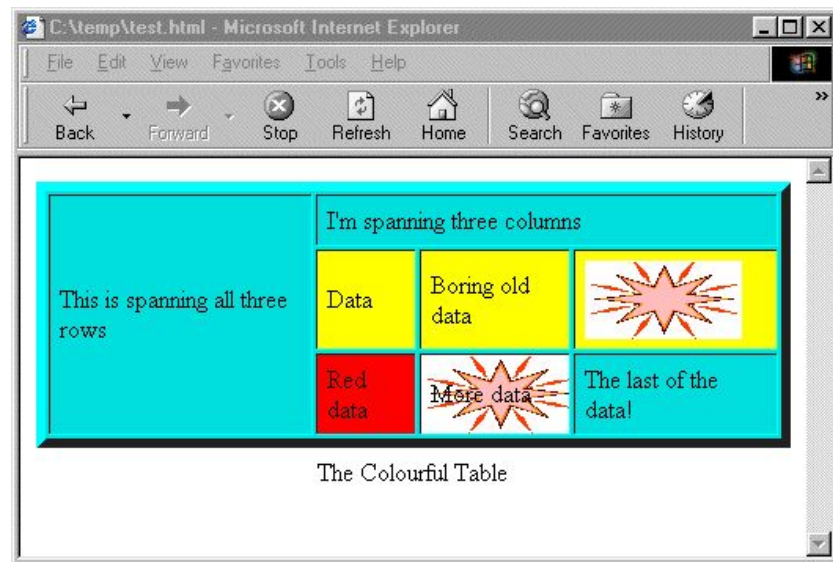
[< Previous](#)

Table Resorted based on Points
When "points" was clicked

HTML Table Example:

Firstname	Lastname	Points
Eve	Jackson	94
John	Doe	80
Adam	Johnson	67
Jill	Smith	50

Text and Image Layout



HTML

Tables and their Properties

Examples:

- ❑ The **border** creates gridlines when set to a value = 1 no gridlines value = 0
- ❑ The **width** declares the width in pixels of the overall table or column
- ❑ The **height** declares the height in pixels of the overall table, column or row
- ❑ **cellspacing** specifies the space between the cells.
- ❑ **cellpadding** specifies the space between the cell content and its borders.
- ❑ **colspan** makes a cell span more than one column
- ❑ The **colspan** makes a cell span more than one column
- ❑ The **valign** makes items in a cell align (top, middle, bottom) vertically **halign** makes items in a cell align horizontally

Would be located in the body <body></body>

```
<table width="400" border="1" cellspacing="0" cellpadding="0">
  <tr>
    <td valign="top">Cell 1 </td>
    <td>Cell 2 </td>
  </tr>
  <tr>
    <td colspan="2">Cell 1 spanning 2 columns</td>
  </tr>
</table>
```

Note Other Table Tag Examples:

```
<th>Firstname</th> -Table Header -centers in the cell and bolds contents
<thead>Groups the header content in a table
<tbody>Groups the body content in a table
<tfoot>Groups the footer content in a table
```


HTML Layout 1

Table/Nesting

```
<table border="1">
  <tr>
    <td>

      <table width="400" border="1">
        <tr>
          <td>Cell 1   Row 1 of second Table</td>
          <td>Cell 2   Row 1 of second Table</td>
        </tr>
        <tr>
          <td>Cell 1   Row 2 of second Table</td>
          <td>Cell 2   Row 2 of second Table</td>
        </tr>
      </table>

    </td>
  </tr>
  <tr>
    <td>Bottom Row</td>
  </tr>
</table>
```

HTML

Layout 2 Divs (Block Level Element)

The `div` element in HTML is a container element that encapsulates other elements and can be used to group and separate parts of a webpage.

A `div` by itself does not inherently represent anything but is a powerful tool in web design.

The `<div>` element usually has no specific semantic meaning by itself, simply representing a division, and is typically used for grouping and encapsulating other elements within an HTML document and separating those from other groups of content. As such, each `<div>` is best described by its contents.

```
<div>  
<p>Hello! This is a paragraph.</p>  
</div>
```

The `div` element is typically a block-level element, meaning that it separates a block of an HTML document and occupying the maximum width of the page.

HTML

Layout 2 Divs- were used in the past to group content but have been further broken into sectioning elements using HTML5. Both Divs and HTML5 use CSS to size, position, and present content.

```
<div class="leftcol">
```

```
  Div 1
```

```
</div>
```

```
<div class="rightcol1">
```

```
  Div 2
```

```
</div>
```

```
<div class="rightcol2">
```

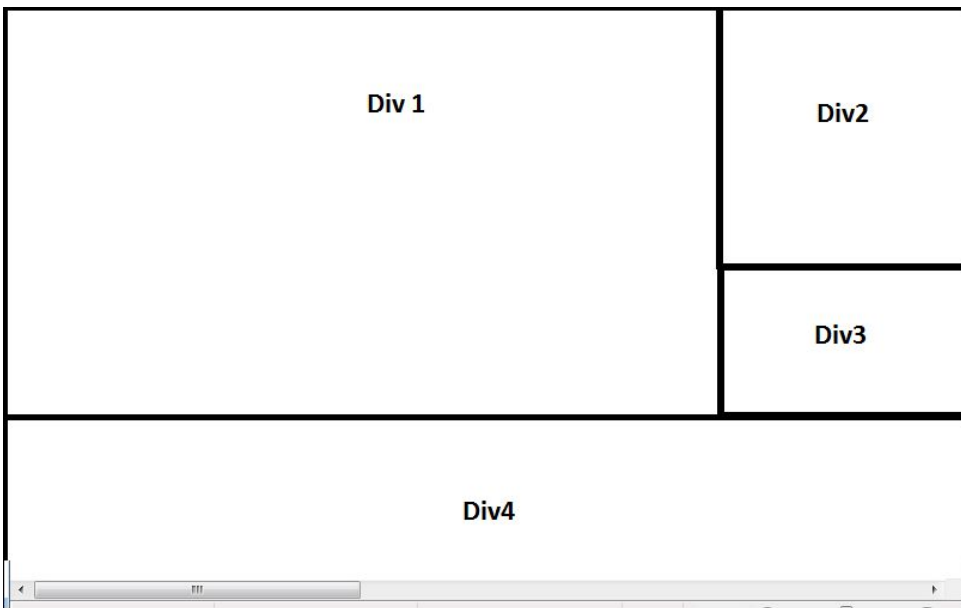
```
  Div 3
```

```
</div>
```

```
<div class="bottom">
```

```
  Div 4
```

```
</div>
```



HTML Layout 3

HTML 5 Introduced additional sectioning for elements

`<article></article>` -self contained content like articles, blogs,widgets

`<aside></aside>` things related to content aside of it like ads, quotes, video, social media, blogs

`<nav></nav>` contain lists and hyperlinks

`<section></section>` contains articles which contain headings

HTML 5 Also introduced semantic grouping elements

`<header></header>` contains logos, page/site titles,introductory content

`<main></main>` the main content of the page can contain articles and sections (use only once)

`<footer></footer>` contains text links, copyrights and sometimes addresses

HTML Grouping and Sectioning

HTML

`<header>`

Header info

`</header>`

`<nav>`

Navigation links

`</nav>`

`<section>`

`<h1>heading</h1>`

`<article>`

article

`</article>`

`</section>`

`<aside>`

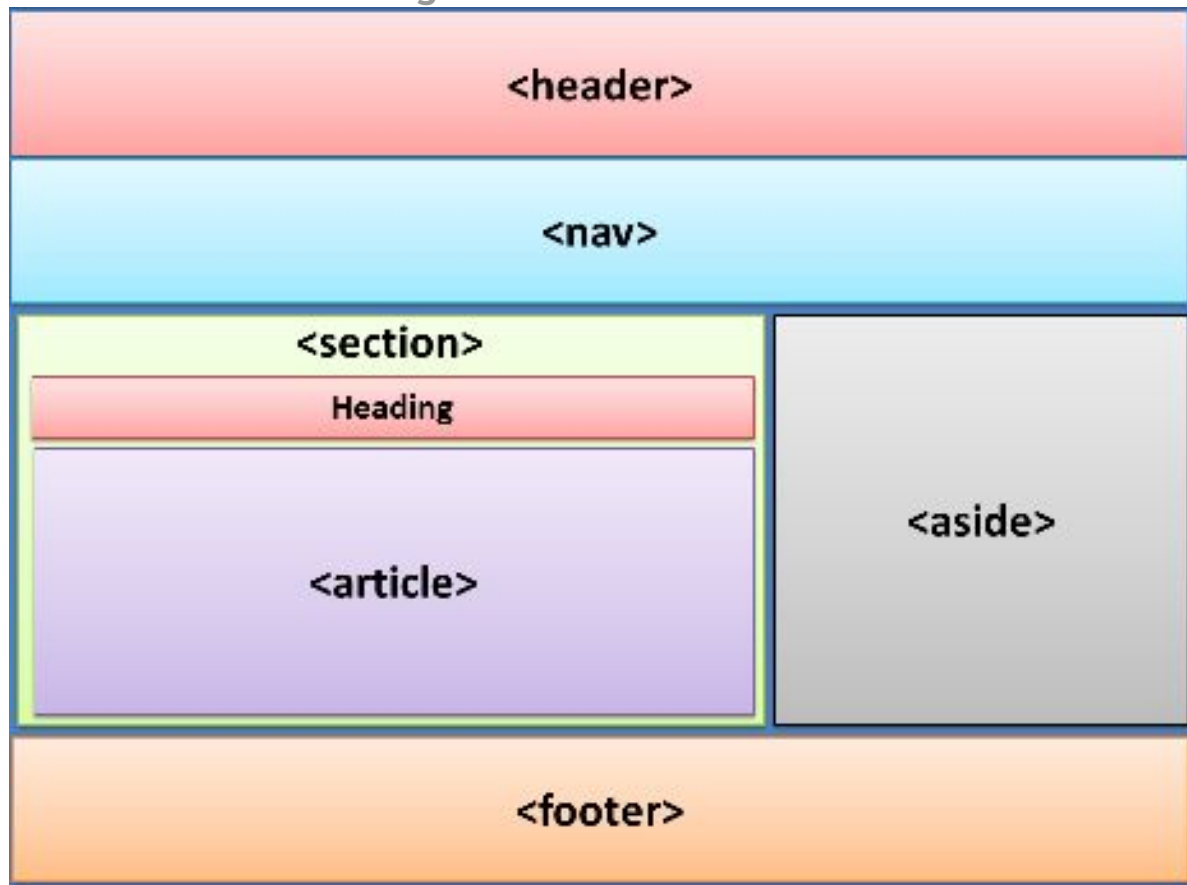
aside

`</aside>`

`<footer>`

aside

`</footer>`



CSS

INLINE CSS RECAP

CSS Uses **Selectors**, **Attributes** and **Values**

(inline CSS goes inside the HTML tag<> with **style=** “**attribute:value;**”)

Background Color:

<html tag/selector style=“**background-color:black;**”**>** changes background color for the inline HTML element

Text Color:

<html tag/selector style=“**color:white;**”**>** changes text color for the inline HTML element

HTML 1

Exercise 1

HTML

1- Create a web page that looks like this name it ([formatting.html](#)) save the file in the [public_html/class-samples/](#) folder:

2- Create a web page that looks like this name it ([formatting2.html](#)) save the file in the [public_html/class-samples/](#) folder:

This is a heading!

Bold Text

Italics

Address:

8895 N Military Trail, Suite 303B

Palm Beach Gardens, FL 33410

Instructors:

- Paul
- Sagiv
- Dang
- Kim

[Click Here for 2nd Page](#)

My Second Page!

[back to main page](#)

HTML 1

Exercise 2

HTML

Create the City Gallery web page with **tables** so that it looks like this and uses the text sent in your email: (use inline css styling for the colors) Upload the page to the webserver public_html/class-samples/city.html

City Gallery	
London	London
Paris	London is the capital city of England. It is the most populous city in the United Kingdom, with a metropolitan area of over 13 million inhabitants. Standing on the River Thames, London has been a major settlement for two millennia, its history going back to its founding by the Romans, who named it Londinium.
Tokyo	

HTML 1

Exercise 3 (Time Permitting)

HTML 5

- ❑ Create a portfolio structure web page using HTML 5 semantic grouping (**header, footer, nav, section, article, aside**) so that it looks like the slide and uses the text/images sent in your email name it (`index.html`): Save the page to `public_html` folder
- ❑ Group the items for the page based on their content type (header, nav, etc.)
- ❑ Save the images to `public_html/images`
- ❑ Upload the page to the web server `public_html/index.html`

Top Half of Page

Your Name

Web Developer



[About](#) [Contact Me](#)



[Resume \(HTML\)](#)



[Resume \(Word\)](#)



[Resume \(PDF\)](#)

Samples



- [Safety](#)



- [Landon Hotel](#)



- [Javascript](#)



- [jQuery](#)

Bottom half of Page



- [PHP](#)



- [My SQL](#)



- [Bootstrap](#)



- [Wordpress](#)

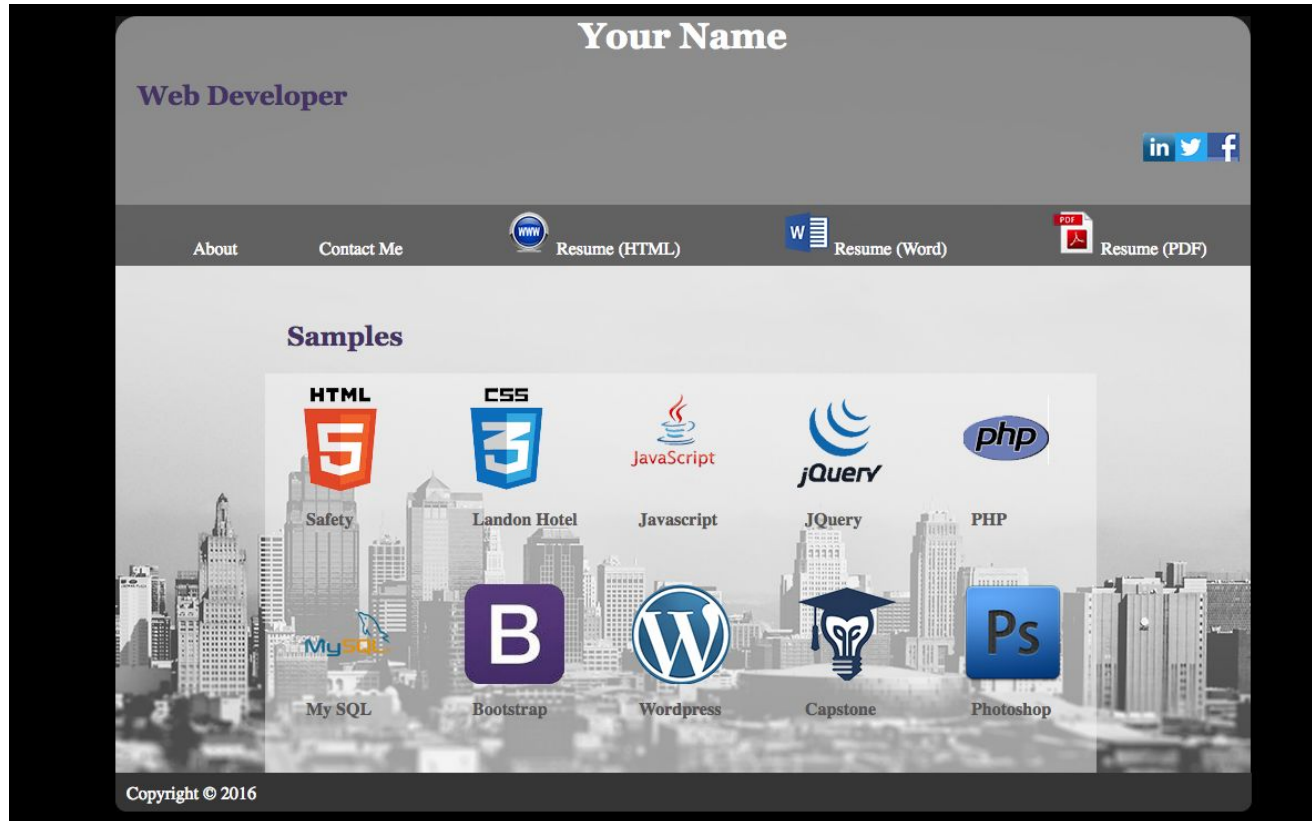


- [Capstone](#)



- [Photoshop](#)

Final Result Will be completed after CSS3 Class



Homework

1. If you have not already done so: Finish Fitness in class exercise and upload to the web server in public_html/class-projects/photoshop directory (Send Instructor the link)
i.e <http://pbcs.us/~firstinitallastname/class-projects/photoshop>
2. Finish in-class exercises for Formatting, City Gallery, and Portfolio Page and upload them to the web server
3. <https://teamtreehouse.com/library/html-basics-2>

End