# Web Programming

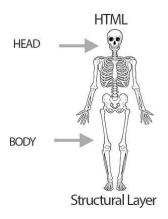


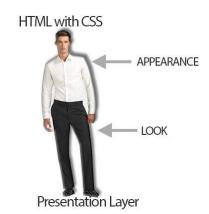
Assignment #1 - HTML

Remember HTML is the underpinning structure of the entire internet. Every page out there is written in HTML.

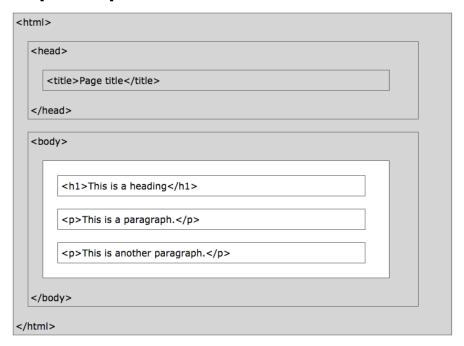
HTML is a basic **scaffolding** that allows us to display text, images, videos, and links on a webpage.

Below is some HTML code that shows you the basics structure of webpage.





#### **Graphical representation:**



The items inside the in the <> are called "tags" example: <html> </html> Note that text, images and other elements must be enclosed inside tags like brackets:

#### Example:

this is text within a paragraph tag

# Let's start doing some HTML

(Exercises 1-14)

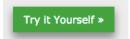
### w3schools.com



w3schools.com is an amazing site designed help users learn the basics of several different programming languages. They have extensive HTML, CSS, and JavaScript tutorials that we will be using.

#### How the site works and how we will use it:

1. Read each section that is listed below. Each section will have some **simple notes** and **"Try it Yourself"** sections.



- 2. The **try it yourself** sections will link you to an online compiler that will run examples of code.
- 3. As you go through each section click on the try it yourself buttons and **use the compiler to change things** to get a feel for how HTML works. The more you interact with the code the more you will learn.
- 4. At the end of each section there is a **Test Yourself with Exercises** section. You **do NOT** need to do all the exercises (only the ones outlined in the instructions below.
- 5. Ask me for help if needed.

You should also set yourself up with a **Thimble** account. **Thimble** is where you will be creating your own web projects.

#### Are You Ready?

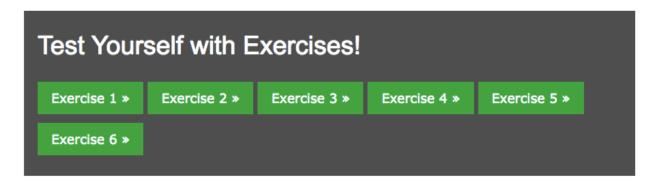
Go to w3schools.com and click on the following tutorials:

Read the tutorial and remember to always use the

Try it Yourself » button.

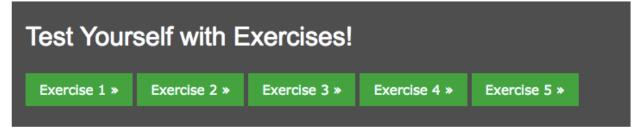
Play around the with code (change things) to see how changes affect the final webpage.

- 2. HTML Basic
- 3. HTML Elements
- 4. HTML Headings
- 5. HTML Paragraphs (Do Exercise 3 at the end of this section)
- 6. **HTML Styles** (do **All** the Exercises as the end of this section)

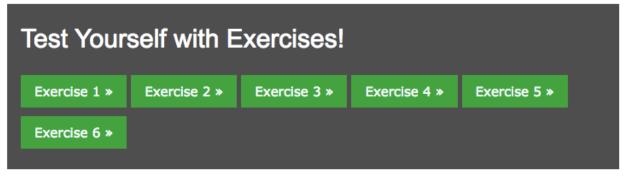


#### 7. HTML Formatting

Do ALL the exercises:



8. **HTML CSS** (Do exercises 1-3 only)



## Page Creation#1

Sign up for thimble. And create a simple webpage (using thimble) that includes the following

Create a simple webpage (like a resume) that includes at least the following:

- 1. Title tag with a title in it.
- 2. Header with some text.
- 3. text inside paragraphs tags
- 4. two images
- 5. two external links (that work!)
- 6. Both inline styling and an external Style Sheet

You must use actual content that adheres to some sort of theme. (resume, Advertisement, news bulletin, sports team, or TV show you are interested etc.)

The idea, when using HTML, is to **always focus on the design and look of your site.** You don't have many tools to work with yet, but try to make something that is visually appealing and is user friendly.

How to hand in Page Creation#1:

For full marks you will publish your page on the internet using Thimble<sup>®</sup> by mozilla (send me a link to your site when you are done).

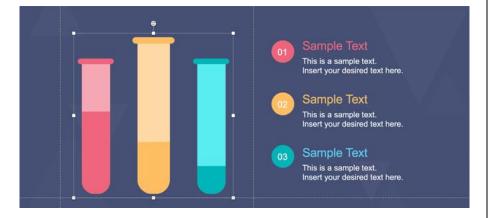
**More HTML exercises:** (do these **after** you do your first page creation)

- 9. **HTML Links** Do exercises 1, 4, 5
- 10. HTML Images
- 11. **HTML Tables** Do exercises 1-6
- 12. **HTML Lists** Do exercises 2,4,6
- 13. **HTML Blocks** Please make note of the difference between **div** vs. **span**
- 14. **HTML Layout** Examine the **Float** and **Flexbox** examples

# Getting stuff in the right position

Knowing how to put things where you want is a critical skill in creating any web application. Two useful ways to do this are using the following CSS attributes:

position: fixed;
position: relative;

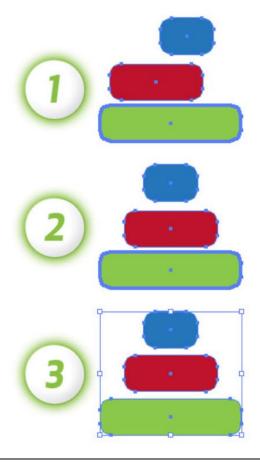


#### 1. Fixed (exercise 15)

The position: fixed; attribute allows you to position an image or text at a fixed position relative to the top left hand corner of an HTML page.

Enter the following into Thimble to test it out. Then modify the left and top pixel positions to see how you can control where things go.

```
<!DOCTYPE html>
<html>
<head>
<style>
t1 {
    position: fixed;
    left: 10px;
    top: 10px;
      }
t2{
    position: fixed;
    left: 10px;
    top: 50px;
</style>
</head>
<body>
<t1>TEXT ONE</t1>
<t2>TEXT TWO</t2>
</body>
</html>
```



#### 2. Relative

#### position: relative;

this attribute allows you to position text or images in a position that is relative to where that element **would go** if the element was just place by the HTML code.

Enter the code below into trinket and play around with the left and top pixel positions to see if you can control where things go.

```
<!DOCTYPE html>
<html>
<head>
<style>
t1 {
    position: relative;
    left: 0px;
    top: 0px;
    border-style: solid;
t2
    position: relative;
    left: 0px;
    top: 0px;
    border-style: solid;
</style>
</head>
<body>
<h1>Title</h1>
<h2>Sub-title</h2>
<t1>TEXT ONE</t1>
<t2>TEXT TWO</t2>
</body>
</html>
```

### Page Creation#2 (HTML Project)

# Web Development - Programming 10 (HTML) Page Creation#2



Look at the **sample pages** below and create website that as **closely as possible** resembles one of the templates. Make your main page link to 2 or more similarly styled content pages. Your site should be created in Thimble (or another approved IDE).

Your Main page should include the following:

- 1. **Exact format** of one of the examples (or an alternatively approved template).
- 2. A working menu bar
- 3. Correctly positioned text and photos
- 4. Both inline styling and an external Style Sheet

Please include the following on one of your other content pages:

- 1. External links to other sites.
- 2. An unordered list.
- 3. Tasteful use of fonts (must use 2 or more font-families).
- 4. Tasteful font *stylings* (must use at least 2 font stylings)
- 5. Import at least one font from google fonts.
- 6. Tasteful background color (other than white or black).
- Download: Mozilla Color Picker Tool <a href="https://addons.mozilla.org/en-US/firefox/addon/colorpicker/">https://addons.mozilla.org/en-US/firefox/addon/colorpicker/</a> and use it to select colors from one of your images and use that color tastefully in your page design. Or find other Color picker tool online.
- 8. Create a page that is a photo gallery of six images blocked nicely on the page with a small title or description for each image. Example on next page

#### REMEMBER:

The idea, when using HTML, is to always focus on the design and look of your site. You don't have many tools to work with yet, but try to make something that is visually appealing and is user friendly.



# **Template#1 (Photo Gallery)**



