

Basics of HTML

Week 1

What is HTML?

- Stands for “HyperText Markup Language”
- Basic structure of every website you will visit
 - What you see when you right click and choose “View Page Source”
- Syntax unlike any other programming language
- Provides a skeleton for you to build on using CSS and Javascript

Basic Syntax of HTML

Everything in HTML is made up of tags

- Special keywords surrounded by <>
- Ex. <p>, <h1>, <div>, etc.
- End with a forward slash inside tag
- Ex. </p>, </h1>, </div>, etc.

Classic “Hello World!” in HTML

```
<p>Hello World!</p>
```

Examples of Text Tags

- `<p>` - paragraph
- `` - bold *
- `<i>` - italicized *
- `<u>` - underlined
- `<mark>` - highlighted

* Text should be bolded/italicized with CSS, but until you learn that, use these tags

How to set up an HTML page

- EVERY page you make should start with the following:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8">
```

- You'll learn what all of these mean eventually, just know that this lets the computer know how to read the rest of the file

End of an HTML Page

- So based on that, every HTML page you create will end with the following:

`</body>`

`</html>`

Nested Tags

- HTML tags can be nested as long as they are closed in the same order as they are opened.
- `<p><i>This has a lot of formatting</i></p>` is OK
- `<p><i>I don't know what I'm doing </p></i>` is BAD

Tags part of every HTML page

- `<head>`
 - Does not contain anything displayed on the screen, just holds information about the page
 - Ex. `<title>`, which tells the page what to show in the tab
- `<body>`
 - Everything that is shown on-screen should be contained inside the body tag.
- Both of these, and everything else in the file, are contained in the `<html>` tag seen on the previous slide

Other useful tags

`
` - Line break (doesn't need a closing `</br>` tag)

`<div >` - Seen earlier, this divides the website into divisions (like the programming team) and makes it easier to use CSS later on)

`` - Link, so that you can include a picture or something. Syntax is ``. Like `
`, doesn't need closing tag

More useful tags - Lists

Lists:

- Unordered - ``
- Ordered - ``
 - For both, use `` for individual elements in list

For example:

Favorite drinks:

``

`Coffee`

Becomes

1. Coffee

`Milk`

Becomes

2. Milk

`Water`

Becomes

3. Water

``

Lists - Continued

Unordered list:

```
<ul>
```

```
  <li>Coffee</li>
```

```
  <li>Milk</li>
```

```
  <li>Water</li>
```

```
</ul>
```

Becomes

Becomes

Becomes

- Coffee

- Milk

- Water

More useful tags - tables

`<table>` - Marks the start and end of the table element

`<tr>` - Marks the start and end of a table row

`<th>` - Box in table meant to be a header, text is centered and bolded as default

`<td>` - Normal elements

REMEMBER TO CLOSE TAGS IN THE CORRECT
EXAMPLE

Tables Example

```
<table>
  <tr>
    <th>Programming Subteam</th>
    <th>Website</th>
    <th>Robot Code</th>
    <th>Telemetry</th>
    <th>Vision</th>
  </tr>
  <tr>
    <th>Leader</th>
    <td>Calvin Godfrey</td>
    <td>Ahmad Bamba</td>
    <td>Ben Ward</td>
    <td>!Zach</td>
  </tr>
```

```
    <tr>
      <th>Goals</th>
      <td>Build awesome
website</td>
      <td>Make the robot do
stuff</td>
      <td>Make stuff talk</td>
      <td>Make the robot see
stuff around it</td>
    </tr>
  </table>
```

Table Example

Programming Subteam	Website	Robot Code	Telemetry	Vision
Leader	Calvin Godfrey	Ahmad Bamba	Ben Ward	!Zach
Goals	Build awesome website	Make the robot do stuff	Make stuff talk	Make the robot see stuff around it

Homework Assignment

- Create a simple HTML page that will tell the rest of the members of this division a little bit more about you

Resources:

https://developer.mozilla.org/en-US/docs/Learn/HTML/Introduction_to_HTML

Me - calvinbbcard@gmail.com, @cgodfrey on slack if you want to message me.

I've probably made all the mistakes you'll do at least twice before, so I can help you find a solution quicker than google