

Intro to HTML

CS 130:
Tools and Technologies of the World Wide Web
Spring, 2022

Announcements

1. Tutorials start today (right after this class)!
 - a. [Sign up for a section](#) (if you haven't already)
 - b. Times and locations [here](#)
2. Assigned readings:
 - a. [Intro to HTML](#) (for today)
 - b. [History of the web / internet](#) (for Monday)
 - c. [Intro to CSS](#) (for Wednesday)

Outline

1. Intro to HTML
2. Rules of thumb
3. Linking to resources
4. Activity

Outline

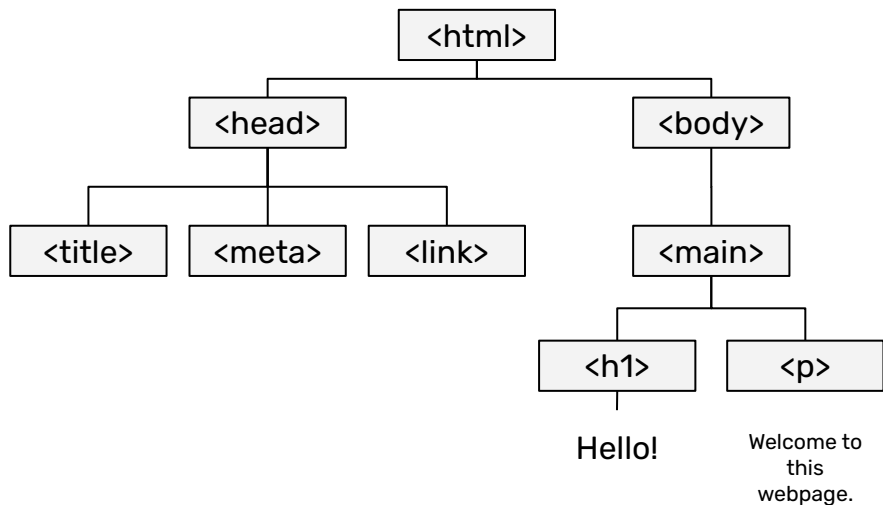
1. **Intro to HTML**
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Intro to HTML (Hypertext Markup Language)

HTML is a way of creating web documents using “markup tags”

- Each HTML tag has a set of rules that you have to follow to correctly use the tag.
- Sometimes, tags need to be nested in a particular way to be understood by your browser.

How the Browser Interprets HTML



HTML File

**Invisible section
(for metadata)**

```
<html lang="en">
<head>
  <title>DOM Example</title>
  <meta name="author" content="EECS 130">
  <link rel="stylesheet" href="main.css">
</head>
```

```
<body>
  <main>
    <h1>Hello!</h1>
    <p>Welcome to this webpage.</p>
  </main>
</body>
</html>
```

**Visible section
(for document elements)**

Lots of elements can go inside of the body element

Body

<body>

Image

Hyperlink

my link

Table

```
<table>
  <tr>
    <td>Cell 1</td>
    <td>Cell 2</td>
  </tr>
  <tr>
    <td>Cell 3</td>
    <td>Cell 4</td>
  </tr>
</table>
```

Containers

```
<div></div>
<span></span>
<nav></nav>
<article></article>
<header></header>
<section></section>
<footer></footer>
```

YouTube Video

<iframe src="??"></iframe>

</body>

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- 2. Rules of thumb**
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1. Avoid spaces, capital letters, and special characters when naming files

When creating new HTML files, it is important to follow the naming conventions listed below:

1. No whitespace

Rename `page 1.html` → `page_1.html` or `page1.html`

2. No capitalization; all lowercase

Rename `Page1.html` → `page1.html`

3. No special characters (',*!^%#). Dashes & underscores are OK

Rename `Jenny's Page!.html` → `jennys_page.html` In addition, all HTML files end with either the `.htm` or `.html` file extension.

2. Most tags have an opening tag and a closing tag

<h1>My Title**</h1>**

But some don't:

- Images: ****
- Line Breaks: **
**
- Horizontal Rules: **<hr />**
- Stylesheet Links: **<link rel="stylesheet" href="my_style.css" />**

You'll eventually figure out the rules as you continue building web pages. You can also consult the [HTML Reference](#) to learn more about the rules of each individual tag.

3. The browser ignores whitespace

The browser ignores whitespace:

`<h1>My Title</h1>`

...is interpreted the same way as...

`<h1>` My

Title

`</h1>`

4. Make your code readable by indenting and using line breaks

Make your code readable by indenting and using line breaks. Please don't do this:

```
<main><p>Welcome, <strong>Leonard</strong></p><ol><li>item  
1</li><li>item2</li><li>item 3</li>  
</ol></main>
```

4. Make your code readable by indenting and using line breaks

Instead, do this:

```
<main>
  <p>
    Welcome, <strong>Leonard</strong>
  </p>
  <ol>
    <li>item 1</li>
    <li>item 2</li>
    <li>item 3</li>
  </ol>
</main>
```

5. Attribute syntax

Attributes are always followed by an equals sign and values are surrounded by quotation marks.

```

```



**No space between attribute, equals sign,
and quotations**

6. Last in, first out (LIFO)

Correct

```
<p>Welcome,  
    <strong>Leonard</strong>  
</p>
```

Incorrect

```
<p>Welcome,  
    <strong>Leonard</p>  
</strong>
```

7. Use comments to help you understand your code

```
<!-- Welcome Section -->
```

```
<section>
```

```
  <p>
```

```
    Welcome, <strong>Leonard</strong>
```

```
  </p>
```

```
  <ol>
```

```
    <li>item 1</li>
```

```
    <li>item 2</li>
```

```
  </ol>
```

```
</section>
```


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Linking to Resources

- Linking is perhaps the biggest idea of the web: documents link together creating a “web” of networked resources.
- Many different HTML tags use the concept of linking:
 - Stylesheet references
 - Multimedia embedding (e.g. images, videos, audio files)
 - Hyperlinks
- Links can be absolute:
<https://i.pinimg.com/originals/ac/f4/9b/acf49bd0f42b441160a9363dce88b243.jpg>
- Or they can be relative (in relation to the location of your html file):
images/my_puppy.jpg

Outline

1. The Document Object Model
2. Rules of thumb
3. Linking to resources
4. **Activity**

In Class Activity

Practice with:

1. Text markup
2. Containers & semantic containers
3. Media
4. Compound tags

Specific Tasks

1. Add a heading and a paragraph element ([hint](#))
2. Add 3 images. Two should link to images in the images folder, and one should link to an image on the internet ([hint](#))
3. Embed a YouTube or Vimeo video: ([hint](#))
4. Add a list ([hint](#))
5. Add a table ([hint](#))
6. Add some semantic tags to give your sections meaning ([hint](#))
7. If time, try to change the background color (hint: look at the stylesheet).