

MSU x Pathlight Belize Coding Club Spring 2023

Week 2

21 January 2023



SIGSOFT



MICHIGAN STATE UNIVERSITY



PATHLIGHT BELIZE

Attendance

- Attendance:
 - <https://forms.gle/NXWVE67PBD1isiLr7>
- Take the presurvey (if you missed last week):
 - <https://forms.gle/AX6YkstBYDRmru2i7>

Before we get started...

- CodeHS Classroom
 - Create an account and join the section with the code **9BF9E**
 - codehs.com/go/9BF9E
 - If you need help setting up your account, please let a mentor know now!

Spotlight



“What Most
Schools Don’t
Teach”

Icebreaker

Week 1 Review

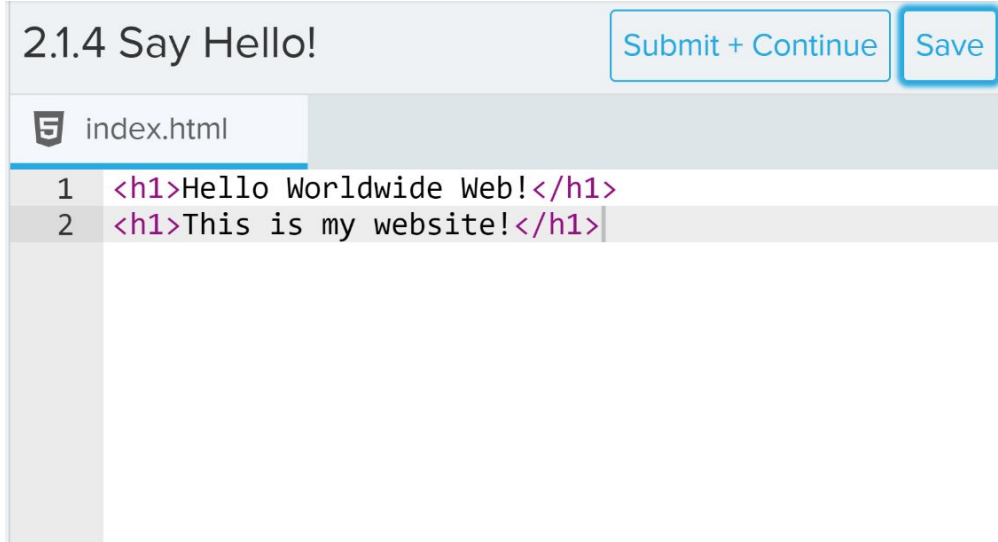
HTML is the coding language we use to build web pages.

HyperText Markup Language

HTML uses **tags** to structure the webpage.

Using CodeHS we can write code and build our website.

We write our code here



2.1.4 Say Hello! Submit + Continue Save

index.html

```
1 <h1>Hello Worldwide Web!</h1>
2 <h1>This is my website!</h1>
```

And our website is here



(Use the refresh arrow to show new changes)

HTML Tags

Tags tell the computer how to structure the text or information inside of them.

Everything inside a tag is affected by it.

<tag>text or other data**</tag>**

opening tag

closing tag

HTML Tags

```
<tag1>Hello, I am a <tag2>programmer</tag2></tag1>
```

If **tag1** makes things bolded and **tag2** makes things underlined, then the code above would result in:

Hello, I am a programmer

HTML Tags

Let's do a quick demo in CodeHS to see what these tags result in:

- `<h1></h1>`
- `<h2></h2>`
- `<title></title>`
- No tags?

Basic HTML structure

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Title of Your Page</title>
5   </head>
6
7   <body>
8     Page Content Goes Here!
9   </body>
10 </html>
11
```

Use this as an outline for every webpage you make!

<!DOCTYPE html> tells the computer we are coding in HTML. *No need for an end tag here.*

<html> everything inside this tag is our html page and will contain all other html tags.**</html>**

Basic HTML structure

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Title of Your Page</title>
5   </head>
6
7   <body>
8     Page Content Goes Here!
9   </body>
10 </html>
11
```

<head> contains *metadata*, or information about the page. Special tags like title go here.

</head>

<title> is the title of the webpage. You can see it on the tab at the top of the browser.**</title>**

Basic HTML structure

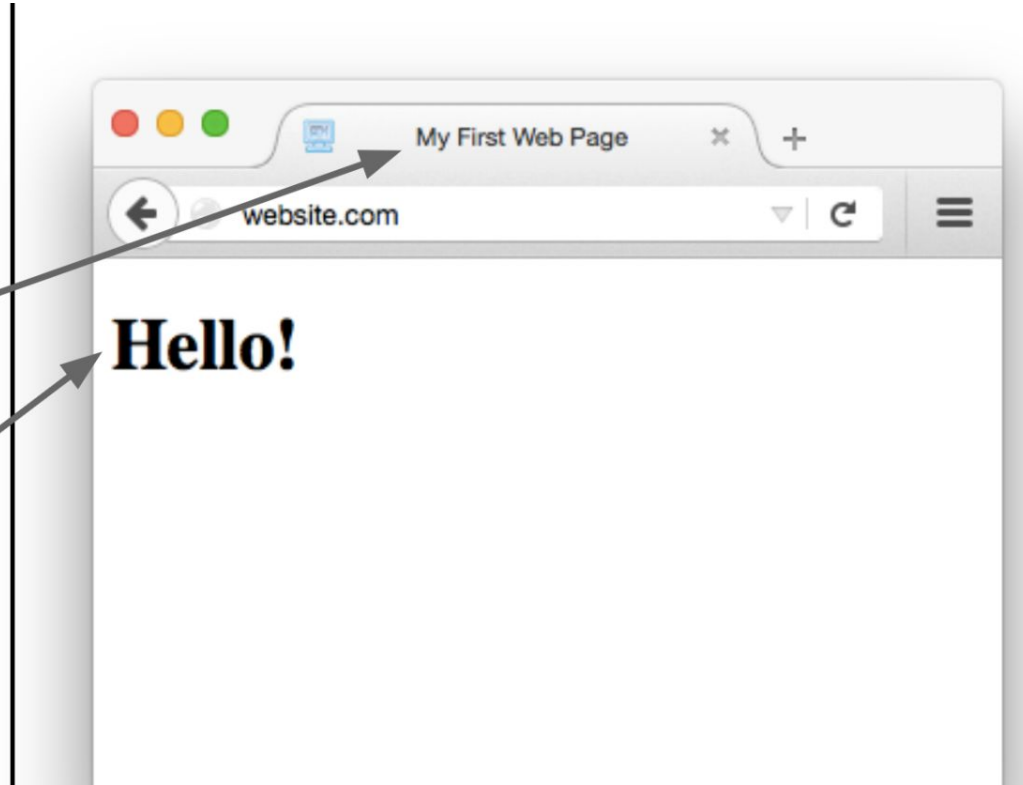
```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Title of Your Page</title>
5   </head>
6
7   <body>
8     Page Content Goes Here!
9   </body>
10 </html>
11
```

<body> is where the actual content of your webpage goes. Text, images, etc.

You can use more html tags like h1 to add more structure to your page.**</body>**

Here is what it looks like in a browser

```
<!DOCTYPE html>
<html>
  <head>
    <title>
      My First Web Page
    </title>
  </head>
  <body>
    <h1>Hello!</h1>
  </body>
</html>
```



HTML Formatting

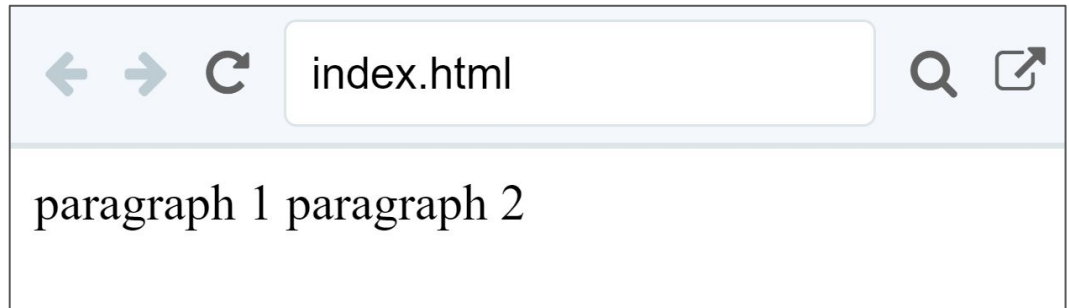
The **<p> tag**: paragraph tag creates a new line *after* the end tag

```
<p>paragraph 1</p>
```

```
<p>paragraph 2</p>
```

```
paragraph 1
```

```
paragraph 2
```



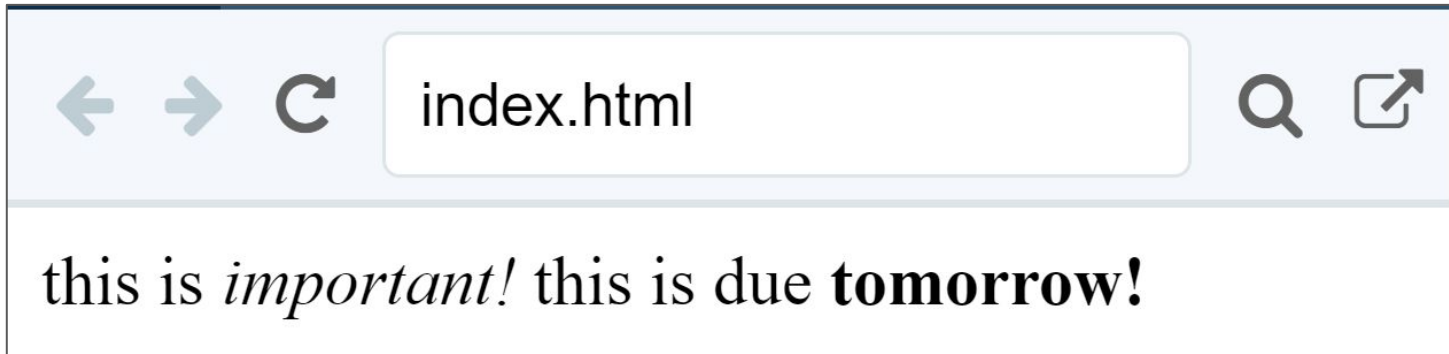
HTML Formatting

The `<i>` tag: italicize tag makes the text *italicized*

```
this is <i>important!</i>
```

The `` tag: bold tag makes the text **bolded**

```
this is due <b>tomorrow!</b>
```



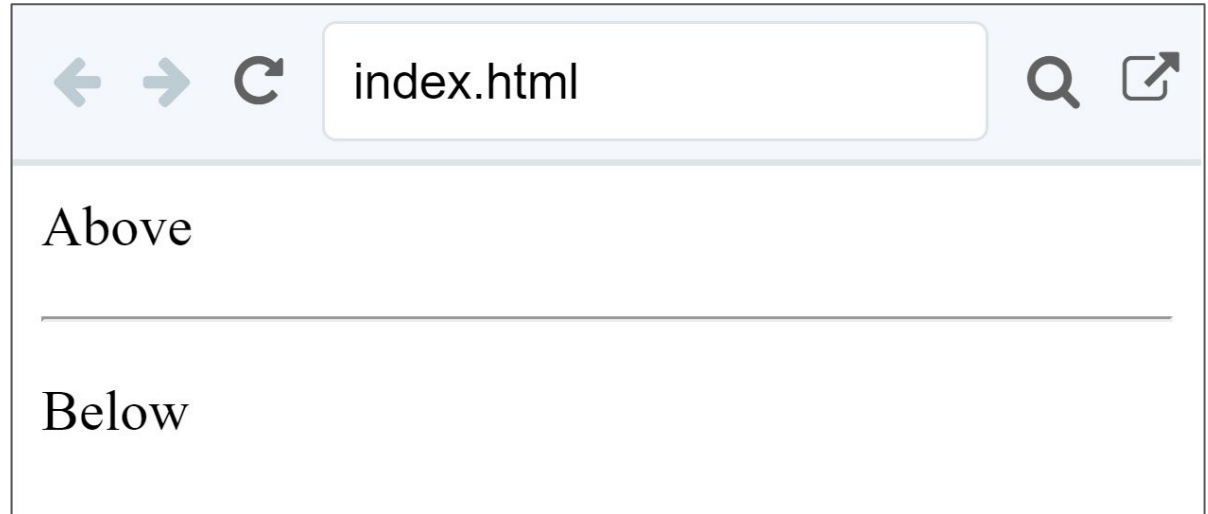
HTML Formatting

The **<hr>** tag: horizontal rule tag creates a horizontal line on the screen. It has no ending tag

```
<p>Above</p>
```

```
<hr>
```

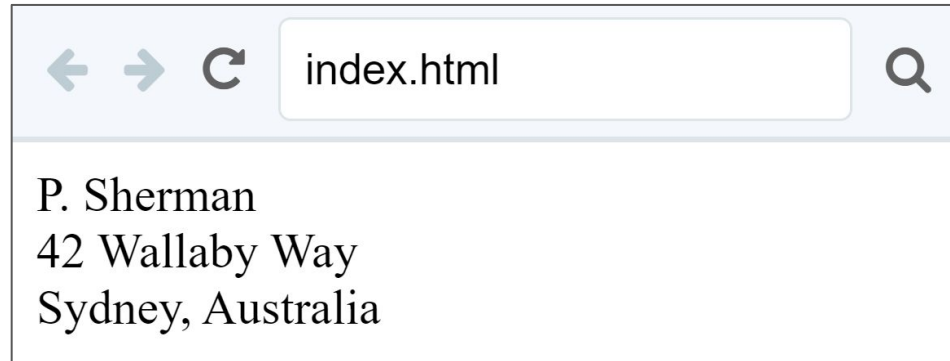
```
<p>Below</p>
```



HTML Formatting

The **
 tag**: line break tag creates a new line or blank line. It has no ending tag.

```
<p>  
  P. Sherman <br>  
  42 Wallaby Way <br>  
  Sydney, Australia <br>  
</p>
```



Without the `
` tags, the text would be displayed on a single line.

HTML Formatting - Headings

We saw `<h1>` tag before, but there is also:

`<h2></h2>`

`<h3></h3>`

`<h4></h4>`

`<h5></h5>`

`<h6></h6>`



as the number gets bigger,
the heading gets smaller

HTML Formatting - Headings

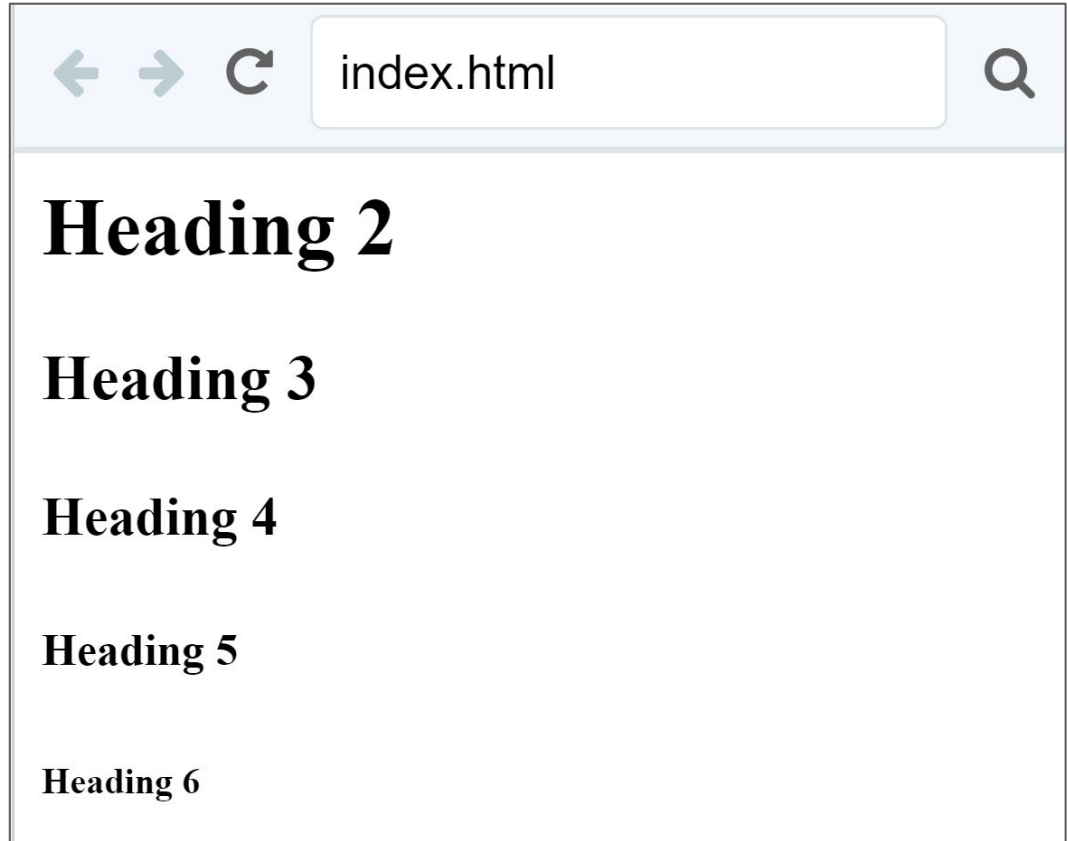
```
<h2>Heading 2</h2>
```

```
<h3>Heading 3</h3>
```

```
<h4>Heading 4</h4>
```

```
<h5>Heading 5</h5>
```

```
<h6>Heading 6</h6>
```



Formatting Tags

<code><p></code>	paragraph
<code><i></code>	<i>Italic</i>
<code></code>	Bold
<code><hr></code>	horizontal rule
<code>
</code>	Line Break
<code><h1>, <h2> . . . <h6></code>	headings (h1 = largest, h6 = smallest)

Docs Tab

The screenshot shows a navigation bar with tabs: Output, Test Cases, Docs, Assignment, Grade, and More. The 'Docs' tab is selected and circled in red. Below the navigation bar is a list of document titles in two columns. The titles are: HTML Basics, CSS Basics, HTML File Skeleton, Inline Style, HTML Tags, Adding CSS to HTML Page, HTML Attributes, Adding External CSS, Headers, CSS Syntax, Basic Tags, CSS Comments, and Semantic Tags. The 'HTML Tags' and 'Basic Tags' titles are circled in red.

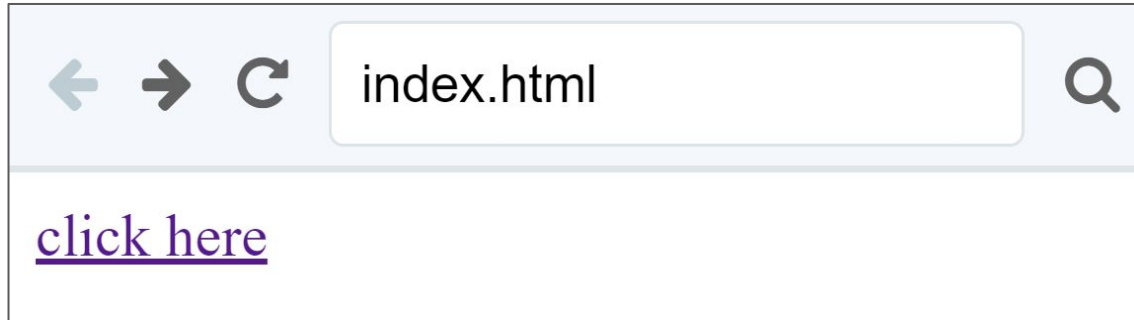
The <a> tag

The <a> **tag**: allows us to define a *hyperlink* in HTML.

```
<a href="https://www.google.com">
```

```
click here
```

```
</a>
```



Now the text “click here” is clickable!

The <a> tag

```
<a href="https://www.google.com">
```

```
click here
```

```
</a>
```

The href is called an *attribute*.

Attributes go inside an opening tag.

The *name* of the attribute is href.

The *value* of the attribute is <https://www.google.com>

Review - Kahoot

<https://create.kahoot.it/details/9ee15e6a-c457-4e2d-ab9a-f07bfe155beb>

Treasure Chest

Earn stickers for completing lessons or sharing your work!

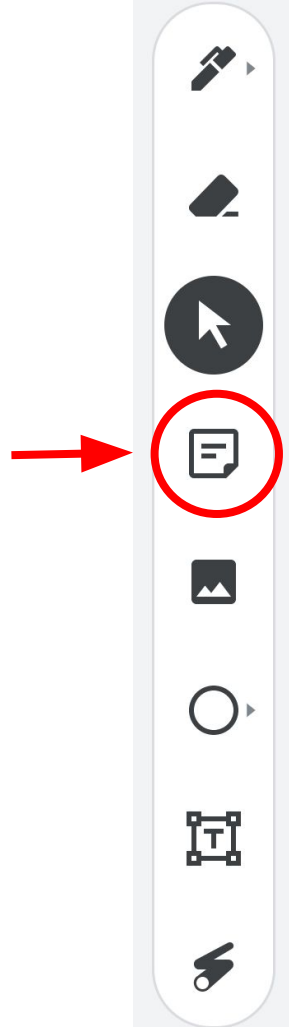
Jamboard - Stand Up

We are trying out a Jamboard for stand up this week.

Go to the Jamboard and for each question, answer with a sticky note.

You can change the size and color of the note.

No need to put your name, these can be anonymous.



Jamboard - Stand Up



Press the arrows at the top to go through all four questions.

Make sure to put an answer down for at least two!

After a few minutes, we can go through some of the responses. Feel free to elaborate on your answer or respond to someone else's!

Jamboard - Stand Up

On a scale of 1 to 10, how are we feeling about today's lesson?

What did you enjoy doing today?

What was a challenge you faced today?

What is something you hope to learn about web development in this course?

Weekly Temperature Check

Please fill out this survey to help us
improve for next week!

[https://forms.gle/9SEF9ex5Q9mkV
bL27](https://forms.gle/9SEF9ex5Q9mkVbL27)

Bonus Hours on Thursdays 7-8 pm

Next session on Saturday 1/28

This weeks goals: finish Week 1 of CodeHS and begin Week 1!
Next week: images in HTML



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