

MSU x Pathlight Belize Coding Club Spring 2023

Week 6

25 February 2023



SIGSOFT



MICHIGAN STATE UNIVERSITY



PATHLIGHT BELIZE

Agenda

9:30 BZT Mentors arrive for set-up

10:05 ish BZT Review / Lesson

10:50 BZT Break

10:55 BZT Lesson continued

11:30 BZT Final Project Intro

11:50 BZT Standup

11:55 BZT Temperature Check

12:00 BZT Dismiss students

Attendance

- Attendance:
 - <https://forms.gle/NXWVE67PBD1isiLr7>

Temperature Check

**Thank you for your feedback,
we're listening!**

Icebreaker - Meme slides

Add some memes to your slide to describe your week!



Spotlight - Adriana Gutierrez



FYI: **Firestore** is an app development platform that helps you build and grow apps and games.

What problem did Adriana address with the system she built? What does the system do?

What opportunities did creating the system bring Adriana?

Review - Lists

Unordered List

```
<ul></ul>
```

Grocery List

- Apples
- Bananas
- Milk
- Bread
- Cookies
- Butter

Ordered List

```
<ol></ol>
```

To Do List

1. Eat breakfast
2. Get dressed
3. Go to school
4. Do homework
5. Go to soccer practice
6. Go to sleep

List Item

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

```
<li>Apples</li>  
<li>Bananas</li>  
<li>Milk</li>  
<li>Bread</li>  
<li>Cookies</li>  
<li>Butter</li>
```

Review - Unordered Lists

```
<h1>Grocery List</h1>
<ul>
  <li>Apples</li>
  <li>Bananas</li>
  <li>Milk</li>
  <li>Bread</li>
  <li>Cookies</li>
  <li>Butter</li>
</ul>
```



Grocery List

- Apples
- Bananas
- Milk
- Bread
- Cookies
- Butter

Review - Ordered Lists

```
<h1>To Do List</h1>
<ol>
  <li>Eat breakfast</li>
  <li>Get dressed</li>
  <li>Go to school</li>
  <li>Do homework</li>
  <li>Go to soccer practice</li>
  <li>Go to sleep</li>
</ol>
```



To Do List

1. Eat breakfast
2. Get dressed
3. Go to school
4. Do homework
5. Go to soccer practice
6. Go to sleep

Review - Tables

<table></table> : wraps around all other tags in the table (the outer box)

<tr></tr> : table row- creates a row in the table

<th></th> : table header- bolded info that describes the data in each column. It usually belongs in the very first row and/or column

<td></td> : table data - information that goes under the headers

border: creates the lines around the rows and columns. The number decides how thick the border will be.

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Number</th>
  </tr>
  <tr>
    <td>Karel</td>
    <td>123-4567</td>
  </tr>
</table>
```

Name	Number
Karel	123-4567

New Language - CSS!

CSS = Cascading Style Sheets

HTML is used for the content of a website.

- How many pages?
- What is it about?
- Headers, paragraphs, lists, images, tables, etc.



HTML



HTML + CSS

CSS is used to design the content on a web page and make it look nice.

- What colors will you use?
- What font style? What size font?
- Background image or background colors, etc.

CSS Rule

- Each aspect of the style you define is called a “Rule”

Selector
(comes from HTML) → **h1 {**

Properties → **font-size: 60px;**
→ **color: red;**

}

CSS Properties

`color` (must choose from list of available colors)

`background-color`

`font-size` (in pixels)

`font-family` (must choose from list of available fonts)

`font-style` (*italic* or normal)

`font-weight` (**bold** or normal) *...and many more!*

Adding CSS to Our Code

```
<!DOCTYPE html>
<html>
  <head>
    <title>CSS Select By Tag</title>
    <style>
      p {
        background-color: pink;
      }
    </style>
  </head>
  <body>
    <p>This will have a pink background</p>
  </body>
</html>
```

- CSS Styling goes in between the <head></head> tags.
- Styling is “**metadata**,” meaning it is information ABOUT the website, but isn’t the actual content on the website.



This will have a pink background

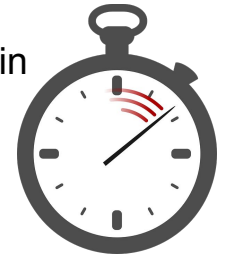
Learn with me! (Mentor Code-Along)

Go to exercise 3.1.3: Styling your H1s to follow along

Learn with me! (Mentor Code-Along)

Go to exercise 3.2.3: Rainbow to follow along

10 min



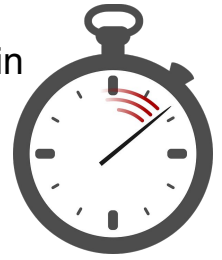
Example 1 (Peer-Code along)

Try example 3.1.4: First Style with CSS

Modify the CSS style of the page so that the *h1* tags are green and the *li* tags have a font size of 18px.

Example 2 (Peer-Code along)

15 min



Try example 3.1.5: List Styling

Remember how tedious it was to type out the style attribute to set the background color for *every single tag* that you wanted to style?

In this exercise, you'll use CSS to style each tag for the music festival announcement with only a single line of code.

STARTER CODE

The given web page shows a music festival announcement.

- The body has background color of LightBlue
- The `h1` tags have a background color of LawnGreen
- The `ul` tags have a background color of Sienna

YOUR JOB

Add the following styles to the specified tags:

- Add the background color "LightYellow" to the `h2` tags
- Add the background color "Orchid" to the `ol` tags
- Make the `li` tags have a font size of 20px (Hint: use the attribute `font-size`)

Loud 'n' Louder Music Festival

Our Line up

- Karel Of The Sound
- Climbing Enlightenment
- Mount Altitude And The Mall
- Princess Atom

Other Goings-On

Break

Time for a break!

If anyone needs to use the bathroom or get a drink,
now's the time!

15 min



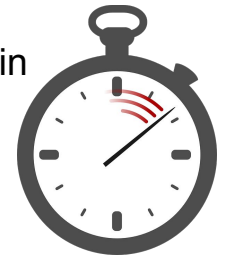
Example 3 (Peer-Code along)

Try example 3.2.5: Set List

The band Mount Altitude And The Mall has written up their set list, but the manager wants you to liven up the colors!

Use CSS rules to make the text of the `<h1>` tags red, the text of the `<h2>` tags blue, and the text of the `<p>` tags orange.

15 min



Example 4 (Peer-Code along)

Try example 3.2.6: Your Appliance Recommendations

Use CSS to select all `` tags and give them all a width of 70px and a height of 70px.

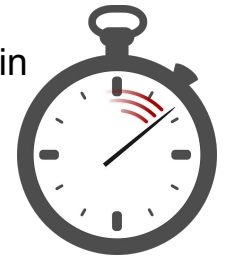
Top Selling Coffee Makers



Top Selling Refrigerators



10 min



If there's time... (Peer-Code along)

Try example 3.2.6: Your Appliance Recommendations

Quickly choose four animals from this list:

https://en.wikipedia.org/wiki/United_States_Fish_and_Wildlife_Service_list_of_endangered_species_of_mammals_and_birds

Create Content

Make a page that contains an `<h2>` header with each animal's name.

Under each header, put an unordered list that states

- its scientific name
- where the animal lives
- if it is "endangered" or "threatened"

All of this information can be found in the table on the provided website.

Make sure to choose at least one endangered animal and one threatened animal.

Set the Style

Modify the body style to set the background-color to #FFD1AA. Set the font-size to 18px.

Baluchistan Bear

- Scientific Name: *Urus thibetanus gedrosianus*
- Lives in: Iran and Pakistan
- Endangered

False Water Rat

- Scientific Name: *Xeromys myoides*
- Lives in: Australia
- Endangered

Final Project Introduction

For the rest of the program, you will be working on making your very own website!

Today we will start brainstorming a topic and design for your website.

We encourage you to pick a cause that is important to you, but you can also choose a hobby or something else you love!

Final Project Introduction

Be sure to include:

- A title (in the head tags)
- A header (<h1>)
- A description of your website (what is it about?)
- Try to implement at least two of the following: **list, table, image, or link**

Once you have completed the above tasks, you can spend time adding colors, finding the best images, formatting, and adding anything else!


Final Project Brainstorming


Head to the Website Exploration example in the Final Project section in CodeHS to follow along.

<https://codehs.com/student/1573853/section/372243/assignment/90443695/>

Final Project Brainstorming

There is no limit to what topic you can choose (use your creativity!), although it would be great if you could connect it to a global issue.

 **Example for baking:** Some issue(s) that I could put on my webpage include: (1) since some don't have the resources to buy an expensive cookbook, I will recommend recipes I love through my website. (2) Many American children suffer from diabetes. I will provide recipes for healthy baked goods, healthy substitutes for common ingredients, and fun activities to get more exercise.

 **Example for dogs:** I am concerned that many people don't take good care of them. My website might include information about my favorite dogs--what I like about them, why they make good pets, and pictures of them--but also provide information about keeping them healthy--the shots they need and when, how much exercise and attention they need, how much and often they should be fed, and so on.

Example Projects

<https://codehs.com/share/id/final-project-ZUqJRD/run> - Recipe Page

<https://codehs.com/share/id/final-project-mnaGcH/run> - Studio Ghibli characters

<https://codehs.com/share/id/final-project-tc1AQT/run> - History of Taiwan

<https://codehs.com/share/id/final-project-sDOZPZ/run> - Mental Health Matters

<https://codehs.com/student/1573850/section/279427/assignment/61408459/> - Vegan for the Planet

Mentor Feedback

Averi Justice
SGWC 2022

MY LINKS

- My Assignments
- My Notes
- Conversations
- Due Dates
- My Badges
- My Practice
- Certifications
- Announcements
- My Shared Programs
- Sandbox Quickstart
- Student Dashboard

SGWC 2022 Overview - Averi Justice

Assignments

[View All SGWC 2022 Assignments](#)

Messages (1)



Averi Justice

Grade: 0 / 5 - Need a hint? Go to `Docs` -> `Headers` to learn how to use the `<h1>` tag!

Resume



Next Assignment: Introduction to HTML

RUN CODE

TEST CASES

ASSIGNMENT

DOCS

GRADE

MORE

CURRENT GRADE

Needs Work as of Feb 02 01:17 AM

0

Out of 5

Grading History

Score: 0 out of 5

Next Step: Needs Work

Graded By: Averi Justice

Timestamp: Feb 02 01:17 AM

Feedback:

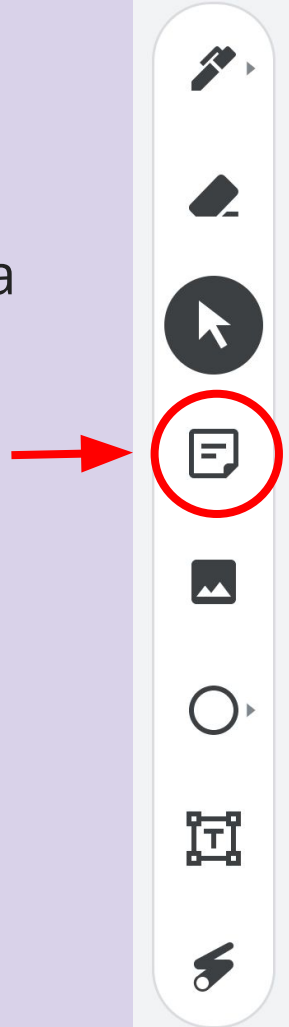
Need a hint? Go to **Docs** -> **Headers** to learn how to use the `<h1>` tag!

Jamboard - Stand Up

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.

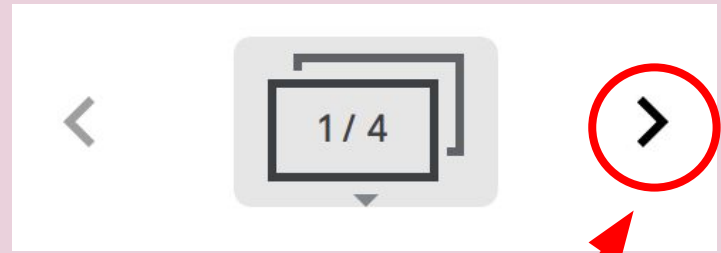


Jamboard - Stand Up

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

1. On a scale of 1 to 10, how are we feeling about today's lesson?
2. What did you enjoy doing today?
3. What was a challenge you faced today?
4. 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/9SEF9ex5Q9mkVbL27>

Bonus Hours!! (Not mandatory)

Thursday 03/02 7 PM - 8 PM BZE Time

Bonus hours are provided for you to ask questions outside classroom and get help!

If you do not have questions, you can still join to chat with mentors!

****Zoom link to Bonus Hours will be sent via email & Whatsapp.****

Bonus Hours on Thursdays 7-8 pm

Next session on Saturday 3/17

This weeks goals: finish Week 5 of CodeHS and begin Week 6!



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