

# What's in a Website?

HTML & CSS



The background features a vertical gradient from purple at the top to teal at the bottom. Large, thick, curved teal lines sweep across the frame. Various white geometric shapes are scattered around: a plus sign in the top left, a downward-pointing triangle in the top center, a tilted square in the top right, a zigzag line in the bottom left, an upward-pointing triangle in the bottom center, and a circle in the bottom right. A large white bracket is positioned on the left and right sides, framing the central text.

# Robot Coaches

# HTML: HyperText Markup Language

Hypertext Markup Language is the coding language we use to help browsers understand the web page. Important to note:

- Browser examples - Firefox, Chrome, Safari, Microsoft Edge
- Everything in a website lives in **HTML elements**
  - **HTML elements** are pieces of code that describe what we want on the page.

BUT, if we only used HTML, our page would be boring...

# Hi, my name is **GIRLS CODE CLUB!**

I am attended by some really awesome girls who love programming.

Some of my favorite things are:

- computers
- coding
- learning

This is how happy I look when girls are programming!





# CSS: Cascading StySheets

Cascading StyleSheets allow us to...

- Set styles (fonts, background colors, sizes, and more)
- Make our page as attractive and easy to read as possible

If we **ONLY** used CSS and not any HTML, our site would look like nothing because there's no content to style. Oops! But, if we add **CSS** to our HTML from earlier, we get...

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# WHAT ELSE IS IN A WEBSITE?

## IMAGES

Images to help visitors understand their content or to make the website more visually appealing.

## JAVASCRIPT

Your packet includes information about JavaScript, but we will be learning more about this in future sessions!



# HTML & CSS: A METAPHOR

Our **HTML** is what makes up the home - walls, floors, doors, windows, things on the walls, furniture. Without **HTML**, we would have nothing in our home.

Our **CSS** is what *styles* the home - the paint on the walls, the colors of the art on the walls, the pattern on the couch. Without **CSS**, we would have a home full of very boring stuff!

We build our **HTML** using a *nested* group of *elements*, which you can think of as the same way a house is a nested group of items. You wouldn't put a couch on an empty lot and call it a house, right?



# CODE EXAMPLE

## IN HTML WORLD

```
<html>
<body>
  <p>Boring couch</p>
  <p>Boring chair</p>
  <ul>
    <li>Some boring picture frame</li>
    <li>Another boring picture frame</li>
    <li>Last boring picture frame</li>
  </ul>
</body>
</html>
```

## IN REAL WORLD

The property our house sits in  
The outside walls of our house  
Piece of furniture - a couch  
Piece of furniture - a chair  
Collage of art on a wall  
 First picture  
 Second picture  
 Third picture  
Done with the collage of art  
Done with the outside walls  
Done with the property outside

# HEADERS, PARAGRAPHS, AND LISTS, OH MY!

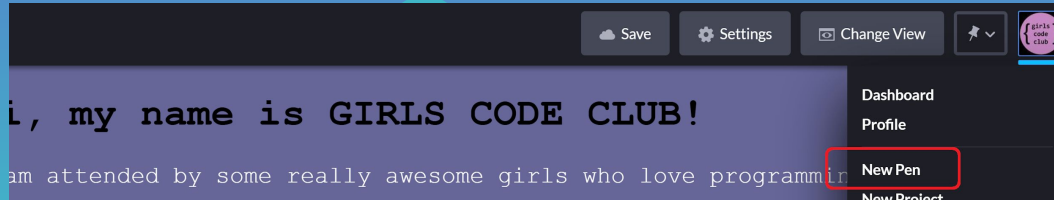
Here are just a few of the elements you could see on a web page:

- **`<h1></h1>` - header**
- `<h2></h2>` - smaller Header
- `<h6></h6>` - smallest Header
- **`<p></p>` - paragraph**
- **`<ul></ul>` - unordered, or bulleted list**
- `<ol></ol>` - ordered, or numbered list
- `<li></li>` - an element in a list
- **`<img></img>` - image**
- `<a></a>` - link
- `<div></div>` - a container to put other elements inside

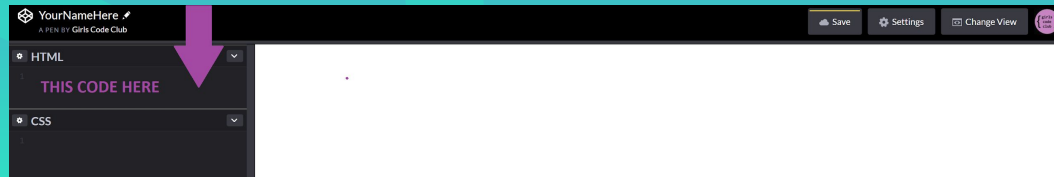
# GETTING STARTED IN CODEPEN

CodePen looks a little different than in previous years, so your instructor will walk through these steps again after the presentation.

Step 1: Create a new website project. In CodePen, these are called Pens.



Step 2: We will use two sections right now to add our code. HTML code goes in the HTML section:



# GETTING STARTED IN CODEPEN (CONTINUED)

And CSS goes in the CSS section:



Easy enough! For now, we will ignore the JS section until we talk about JavaScript.



# IDEAS FOR PERSONALIZING YOUR WEBSITE

- Make the background your **favorite color**.
- Put your **name** in the header.
- Make the first paragraph about something that **makes you happy**.
- Put your **favorite things** in the list.
- Tell us about your **favorite food**, and include a picture!

# Female Hero of the Month

## ADA LOVELACE

- **First programmer. Ever.**
- Every 2nd Tuesday in October is Ada Lovelace day!
- [https://www.youtube.com/watch?v=uOkmylCUW\\_c](https://www.youtube.com/watch?v=uOkmylCUW_c)

