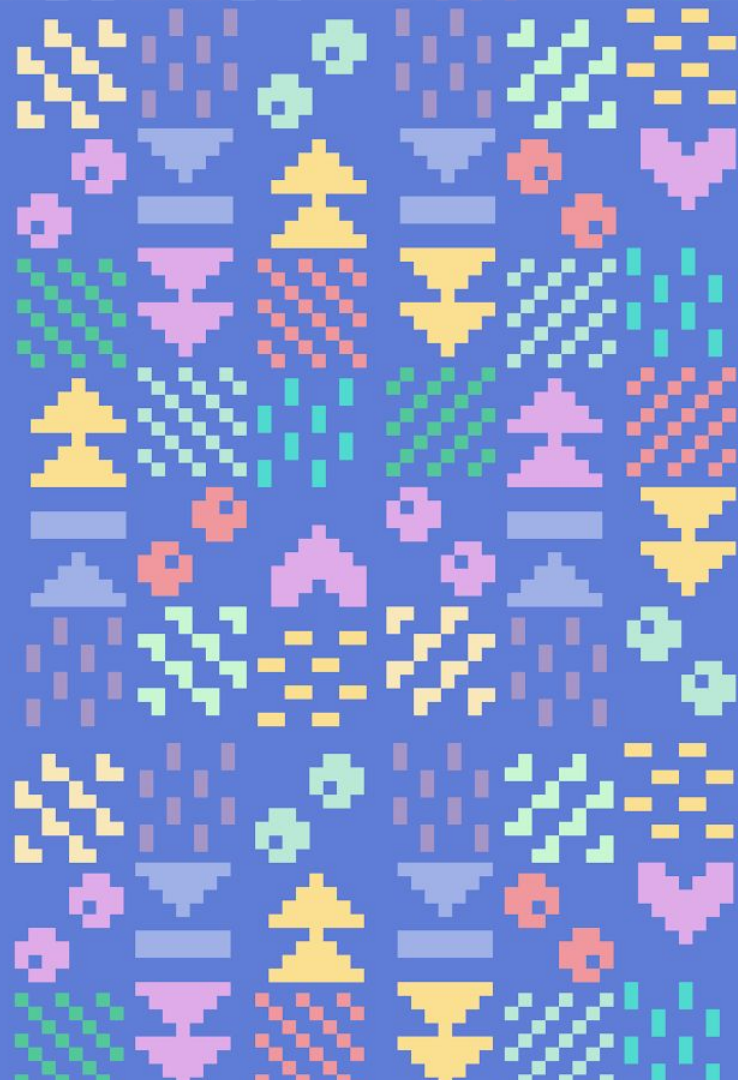


**GIRL  
GEEK  
ACADEMY**

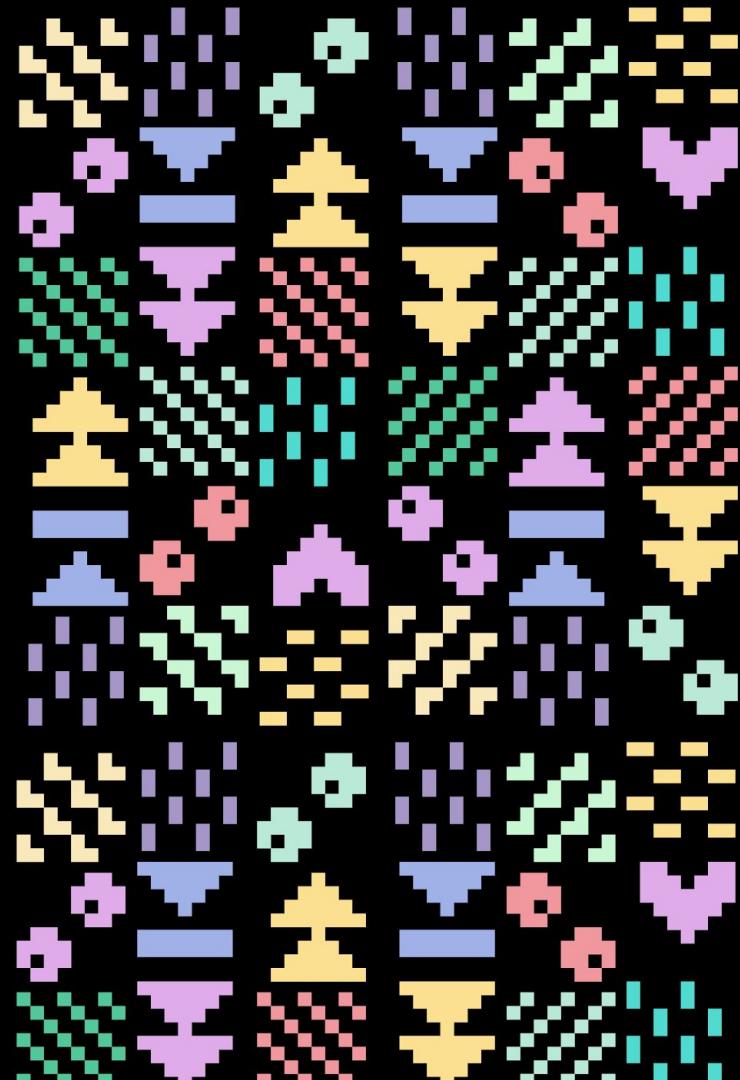
**Make your own website  
with HTML**



# GIRL GEEK ACADEMY

## ACKNOWLEDGEMENT

We would like to acknowledge the Wurundjeri people of the Kulin nation who are the traditional custodians of the land on which we're meeting today.

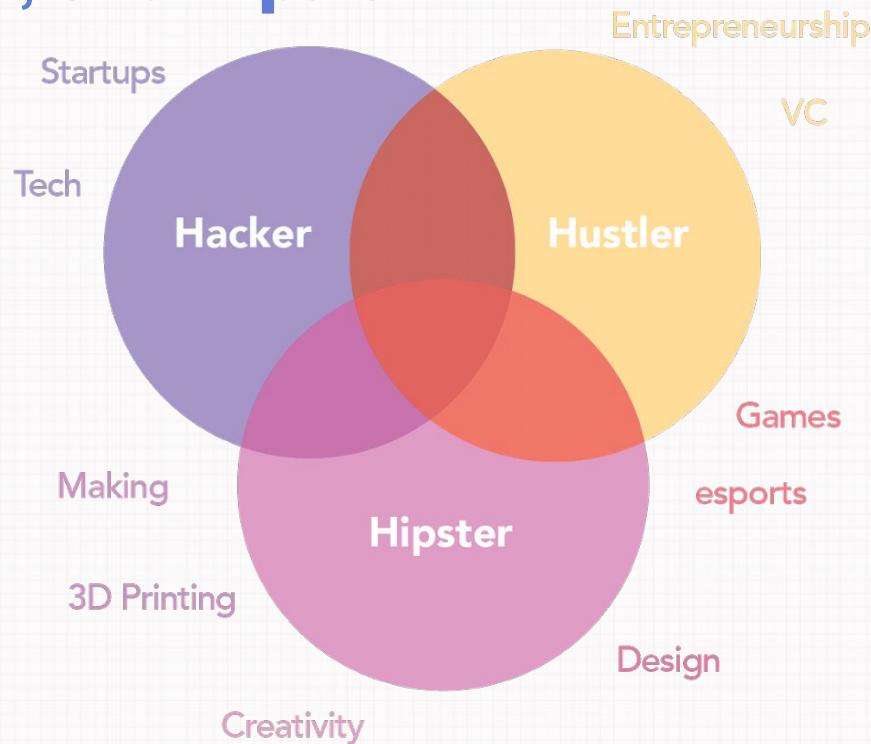


# Who are we?!

We're Leura, Cherie and Rubii! It's nice to  
meet you 💖

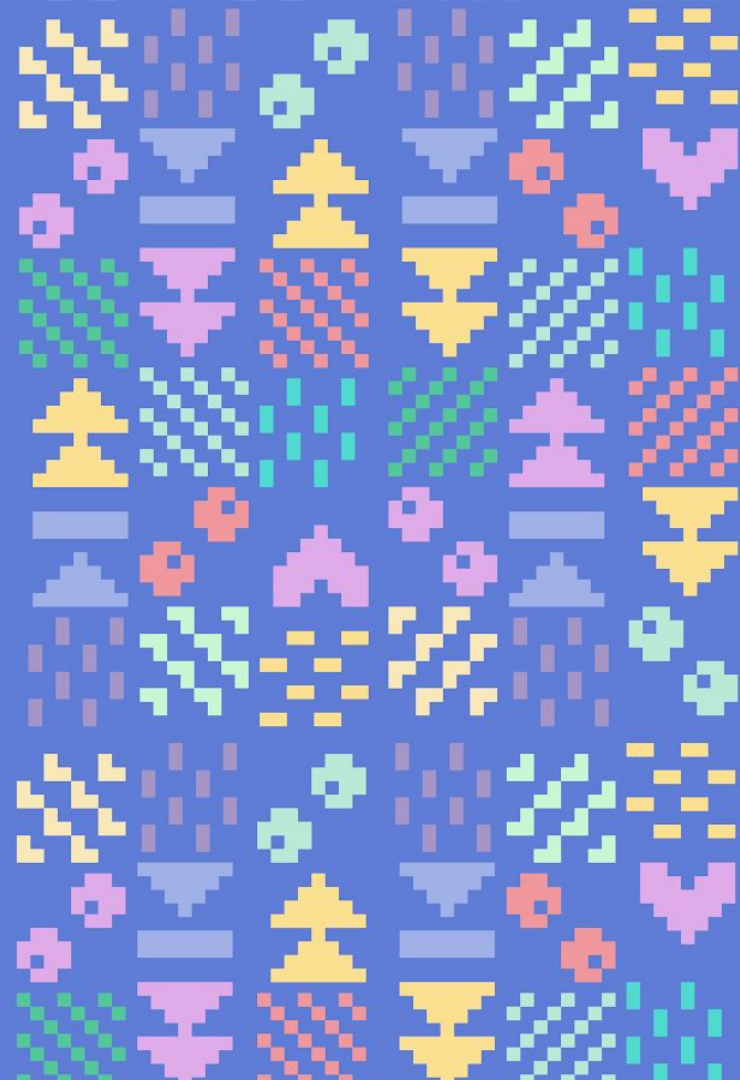
# Are you a Hacker, Hustler, or a Hipster

WHAT WOULD THE INTERNET  
LOOK LIKE IF THERE WERE  
MORE WOMEN BUILDING IT?



# GIRL GEEK ACADEMY

OUR CORE VALUES





# What's a Girl Geek?

## GIRL GEEKS ARE PROBLEM SOLVERS!

**Geek** /gik/ *noun*.

1. A person who's highly passionate, excited and deeply curious. You could be a geek about anything. Geeks care; they show up and they support the people around them.
2. Geek is a self-described term. It could be insulting to call someone a geek, but saying "we're geeks" is expressing it as a term of affection. "I'm a geek" is a term of pride.

*verb.* **1.** The act of being a geek. **2.** Activities include geeking out with friends, and getting your geek on about something.

# How we learn together at Girl Geek Academy

We will all learn at a different pace, and that's GREAT!

Some of us are all different ages

Role models to each other

Ask questions - we will always answer them, even if it takes a few minutes

This is a marathon not a sprint.

We have a couple hours together today, but MANY more hours together ahead!

Let's talk about websites for a second



**All websites** (the front end at least) **are**  
**made with a combination of**  
**HTML, CSS and Javascript!**

- That means every website you see has at least some **HTML, CSS** or **Javascript** in it!





# What is HTML for?!





In short, HTML is used to put  
**structure**, **text** and **information** on  
our website!



# What you can create with HTML

- HTML is a **markup language**, so that means we can design web pages with it
- HTML can also be used in **game development**, specifically HTML5
- Lots of web pages you see online are made with HTML!
- **Some games made in HTML5:**



# What about that word... **markup language**

- Do you have any idea what it is?





# What about that word... **markup language**

- Do you have any idea what it is?



**It prepares a structure for data, or prepares the look or design of a web page**

- Some examples of markup languages:
  - HTML – Hypertext Markup Language
  - MathML – Mathematical Markup Language
  - XML – eXtensible Markup Language

**Note: It is different from a programming language! A programming language has a wider range of use cases!**



# Why is HTML important?



- It's part the **fundamentals** (like "ABC") of front-end web development
- Great way of learning how to **think in a structured manner** (which is necessary when programming)
- You can **make your own website!**
- Or **games!**
- So it's super useful, and is **used by the pros** to make lots of things!

# Let's start writing some HTML!

<https://www.khanacademy.org/computing/computer-programming/html-css>

# How do I write HTML at home without the internet?!

- **Notepad++** is a text and source-code editor used by lots of coders!
- It reads many file formats (i.e. HTML, Javascript, Python) and has **colour coding** to make it easier to read and write code
- It's free!



<https://notepad-plus-plus.org/downloads/>

# How do I test out my HTML later?

- **W3 Schools** have a great website, where you can write code, and see what it would look like in a web browser!
- We'll post a link in the chat

**If you ever want to make your own website, you can quickly test out how your code will look here!**

[https://www.w3schools.com/html/tryit.asp?filename=tryhtml default](https://www.w3schools.com/html/tryit.asp?filename=tryhtml_default)

**Now you know a bit about HTML and have written some, what are some projects you think you could make?**

**Let us know - what kind of website would you like to make?**



## HTML and AI?

Now that we know a bit about HTML, let's consider Artificial Intelligence (AI) for a second...

Do you think AI could generate HTML?

# HTML and AI?

Yes! Here is an example:

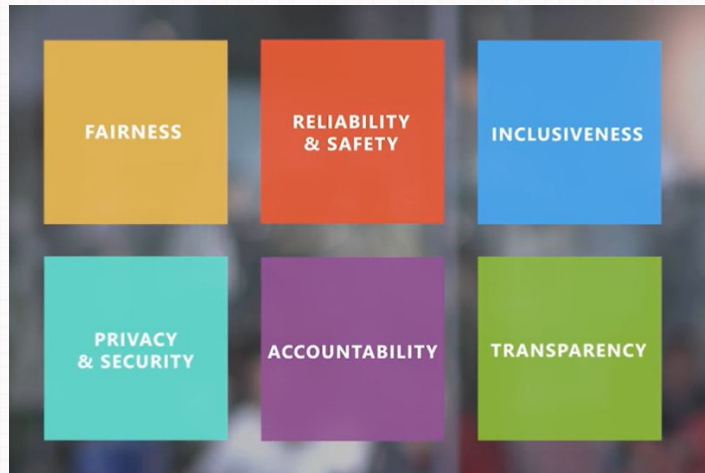
<https://sketch2code.azurewebsites.net/>

# The Ethics of AI

- **Innovating responsibly**
- **Empowering others**
- **Fostering positive impact**

Check it out, go to ...

<https://www.microsoft.com/en-us/ai/ai-for-good>



# HTML Syntax: Tags

## Tags

Div Section

```
<div>Block element</div>
```

Headings

```
<h1>Page title</h1>
<h2>Subheading</h2>
<h3>Tertiary heading</h3>
<h4>Quaternary heading</h4>
```

Paragraph

```
<p style="text-align: center;">text</p>
```

Image

```
Jump to footnote</a>
<br />
<a name="footer"></a>Footnote content
```

**Bold text**

```
<strong>Bold text</strong>
```

*Italic text*

```
<em>Italic text</em>
```

Underlined text

```
<span style="text-decoration: underline;">Underlined text<
```

- Tag example: `<html>`
- Opening tag `<html>`
- Closing tag `</html>`



## Iframe

```
<iframe src="link.html" width="200" height="200">
</iframe>
```

## Abbreviation

```
<abbr title="Hypertext Markup Language">HTML</abbr>
```

## Comment

```
<!-- HTML
Comment -->
```

## Horizontal Line

```
<hr />
```

## Line break

```
<br />
```

## Quotation

```
<q>Success is a journey not a destination.</q>

<blockquote cite="https://zuwix.com/">
The Rubik's Cube is the World's best selling puzzle toy.
</blockquote>
```

## Video

```
<video width="200" height="150" controls>
<source src="vid.mp4" type="video/mp4">
<source src="vid.ogg" type="video/ogg">
No video support.
</video>
```

## Audio

```
<audio controls>
<source src="sound.ogg" type="audio/ogg">
<source src="sound.mp3" type="audio/mpeg">
No audio support.
</audio>
```

- You can embed external documents using the `<iframe>` tag or **inline frame element**
- The `<video>` tag or **video element** allows you to add media too like a Youtube or Vimeo URL link
  - For this option, you can hide any video controls like the pause button or sound options etc
- For the iframe element, there is no such option to hide controls
- Want to add audio? Use the `<audio>` tag or **audio element!**



# HTML Syntax: Attributes

## Attributes 🍌

### SYNTAX

```
<tag attributename="value" />
```

- lowercase attributes, quote values

### Global attributes

accesskey, class, contenteditable, data-\*, dir, draggable, hidden, id, lang, spellcheck, style, tabindex, title

```
<div id="demo" class="big" dir="ltr" lang="en" style="color: red;" tabindex="0" title="Tooltip" contenteditable="true" spellcheck="true" data-heatmap="99">Hello World!</div>
```

### Internationalization: dir, lang, xml:lang

```
<html lang="en-US">
...
<p dir="rtl">Right to left (Arabic)</p>
...
</html>
```

### Link: download, href, hreflang, media, rel, target, type

```
<a href="https://htmlg.com/" target="_blank" rel="external" Link
</a>
```

### Image: src, alt, height, ismap, longdesc, srcset, usemap, width

```

```

### All attributes

<b>accept</b>	<i>form, input</i>
<b>accept-charset</b>	<i>form</i>
<b>accesskey</b>	<i>Global attribute</i>
<b>action</b>	<i>form</i>
<b>align</b>	<i>applet, caption, col, colgroup, hr, iframe, img, table, tbody, td, tfoot, th, thead, tr</i>
<b>alt</b>	<i>applet, area, img, input</i>
<b>async</b>	<i>script</i>
<b>autocomplete</b>	<i>form, input</i>
<b>autofocus</b>	<i>button, input, keygen, select, textarea</i>
<b>autoplay</b>	<i>audio, video</i>
<b>autosave</b>	<i>input</i>
<b>bgcolor</b>	<i>body, col, colgroup, marquee, table, tbody, tfoot, td, th, tr</i>
<b>buffered</b>	<i>audio, video</i>
<b>challenge</b>	<i>keygen</i>
<b>charset</b>	<i>meta, script</i>
<b>checked</b>	<i>command, input</i>
<b>cite</b>	<i>blockquote, del, ins, q</i>
<b>class</b>	<i>Global attribute</i>

- attribute = "value"

# HTML Syntax: Structures



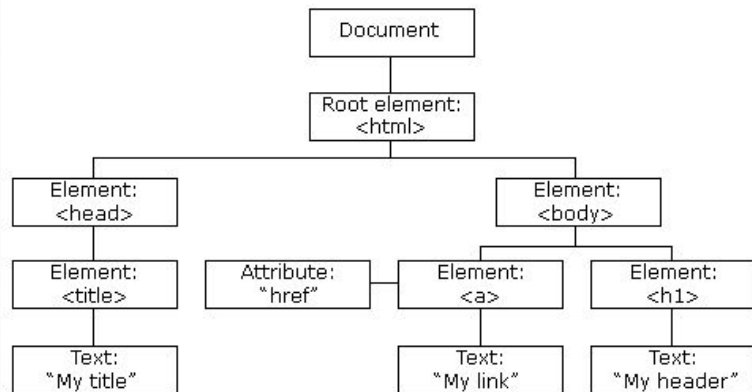
Basic structure:

- A **DOCTYPE** html tag
- An opening **html** tag
- A **head** element
- A **body** element
- A closing **html** tag

Read more about the **different modes** here:

[https://developer.mozilla.org/en-US/docs/Web/HTML/Quirks\\_Mode\\_and\\_Standards\\_Mode](https://developer.mozilla.org/en-US/docs/Web/HTML/Quirks_Mode_and_Standards_Mode)

# The Document Object Model (DOM)



The **DOM** looks like a tree, doesn't it? Similarly, your web browser creates a **tree-like data representation** when a web page is opened. It **consists of HTML elements, attributes, values and content etc.**

**Note:** You can use Javascript to access and change the elements in DOM? We'll be learning more about Javascript in the next lesson! To read more about this, go to... [https://developer.mozilla.org/en-US/docs/Web/API/Document\\_Object\\_Model/Introduction](https://developer.mozilla.org/en-US/docs/Web/API/Document_Object_Model/Introduction)

**THANKS FOR JOINING IN TODAY AND HAVING FUN  
TOGETHER EVERYONE!!**

**Please feel free to send any future HTML  
projects you do to**

**[hello@girlgeekacademy.com](mailto:hello@girlgeekacademy.com)**

**We wanna see what you come up with!**