



# Beginning HTML and CSS

## Class 1

# Welcome!

Girl Develop It is here to provide affordable and accessible programs to learn software through mentorship and hands-on instruction.

## Some "rules"

- We are here for you!
- Every question is important
- Help each other
- Have fun

# Meet Your Instructor

**Cara Jo Miller**

- Pixel Wrangler at **Are You a Human**
- Founder of **Run This Race**
- Leader at **Refresh Detroit**
- Co-organizer of **WordCamp Detroit**
- Twitter: **@corrinajo**
- E-mail: **corrinajo@gmail.com**

# Meet Your Instructor

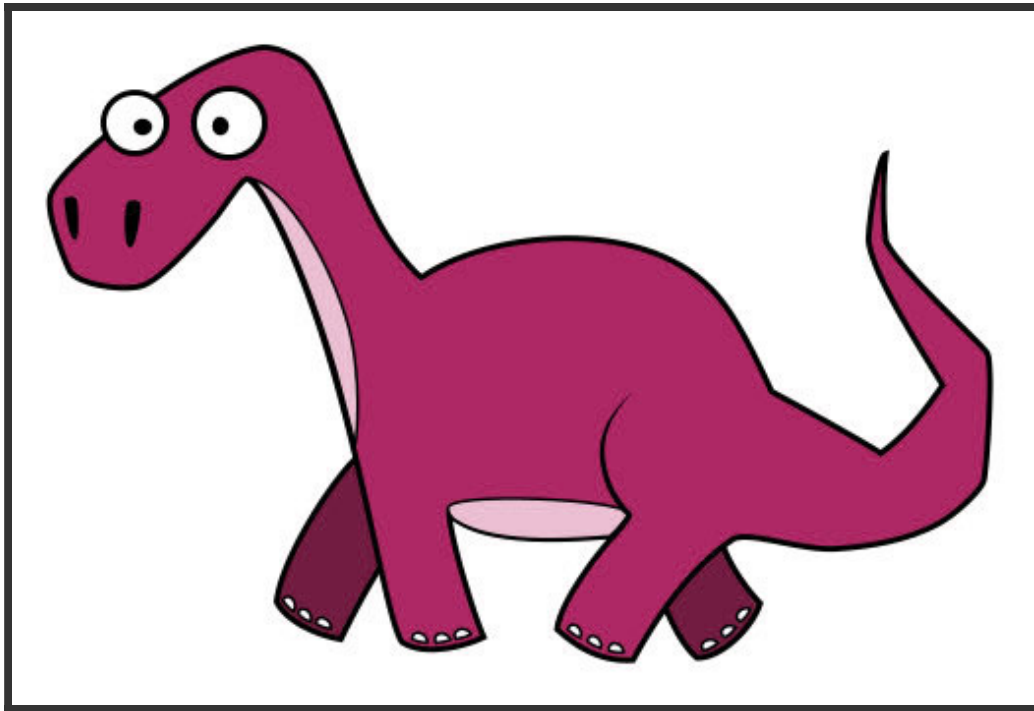
## How I got started with the web!

- **1996:** Built first computer from spare parts in my Dad's shop.
- **1997:** Got bored on a snow day and decided to learn HTML from **Lissa Explains it All**
- **1997:** Big into Pokémon and drawing. Coded first site to showcase Pokémon drawings to family members and friends.
- **1998-2012:** Decided that the internet was the coolest thing in the world and decided to make a career out of it.

# Now it's all about you!

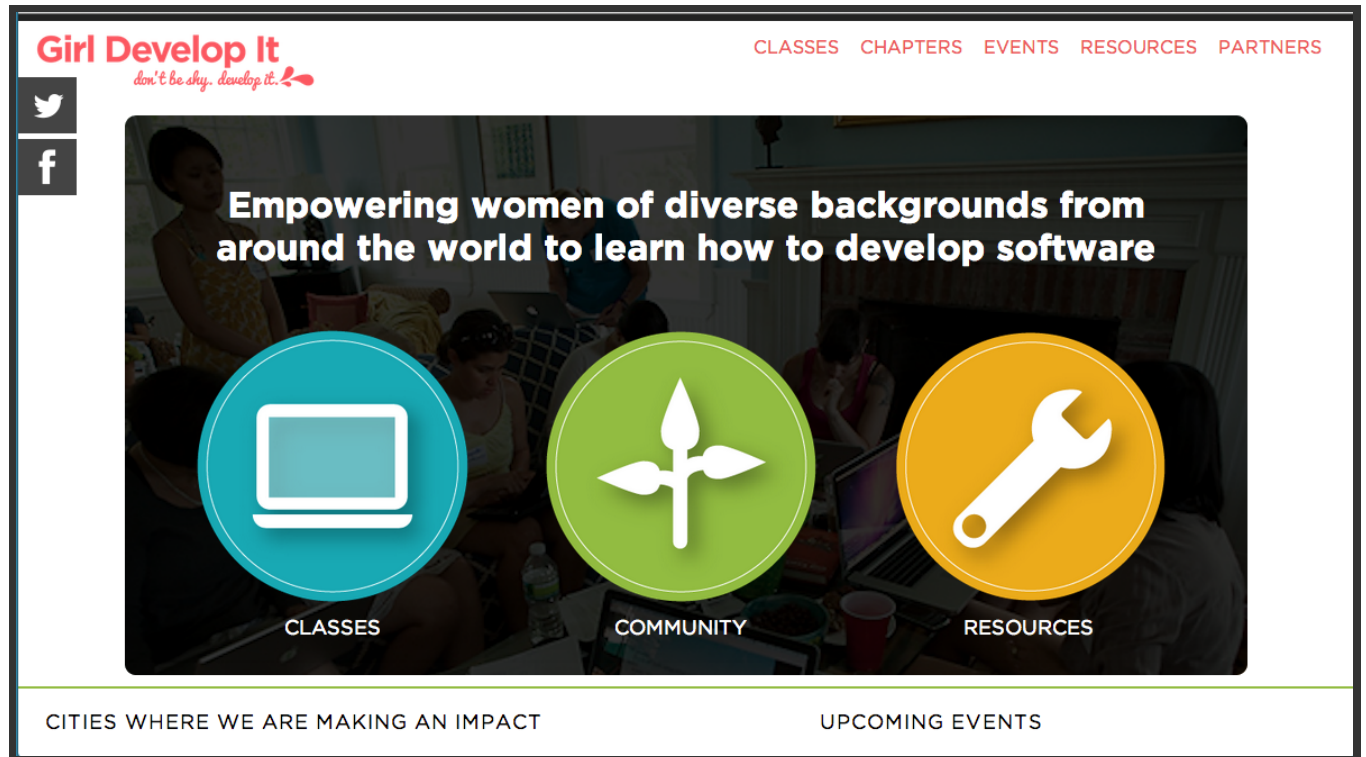
Tell us about yourself.

- Who are you?
- What do you hope to get out of the class?
- What is your favorite dinosaur?



# What is HTML?

HTML is the code that allows us to build websites



# What is HTML?

If you 'view the source', you see this

```
33 </li>
34 <li>
35 <a href="http://www.facebook.com/girldevelopit" alt="Girl Develop It on Facebook" target="_blank"></a>
36 </li>
37 </ul>
38 <div class='header'>
39 <a href="/"></a>
40 <span id='menu'>
41 <nav class='menu' id='menu'>
42 <ul>
43 <li id='about'>
44 <a href="/partners">PARTNERS</a>
45 </li>
46 <li id='materials'>
47 <a href="/materials">RESOURCES</a>
48 </li>
49 <li id='events'>
50 <a href="/events">EVENTS</a>
51 </li>
52 <li id='chapters'>
53 <a href="/chapters">CHAPTERS</a>
54 </li>
55 <li id='classes'>
56 <a href="/classes">CLASSES</a>
57 </li>
58 </ul>
59 </nav>
60
61 <div class='clear'></div>
62 </span>
63 </div>
64 </header>
65
66 <section id='page'>
67 <div id='page-container'>
68 <div id='body-content'>
69 <div class='topics'>
70 <div class='overlay'></div>
71 <div class='overlay-div'>
72 <p class='tagline'>
73 Empowering women of diverse backgrounds from around the world to learn how to develop software
74 </p>
75 <ul class='topic-buttons'>
76 <li class='topic-button'>
```

# History of HTML

- Invented by Tim Berners-Lee
- Created "hypertext" to share scientific papers
- First web page August 6, 1991
- Standardized by w3 Consortium (pack of super nerds)



# History of HTML

- HyperText Markup Language
- Early 90s
- HTML 4 in 1997
- XHTML in 2000
- HTML 5 in 2008

# Terms

- **Web design**  
The process of planning, structuring and creating a website
- **Web development**  
The process of programming dynamic web applications
- **Front end**  
The outwardly visible elements of a website or application
- **Back end**  
The inner workings and functionality of a website or application.

# Tools

- Browser
  - Chrome
  - Firefox
- Development Toolkit
  - Chrome - Inspector
  - Firefox - Firebug
- Text Editor
  - TextWrangler - Mac
  - Notepad ++ - Windows
  - Sublime Text - Mac or Windows**

# Anatomy of a website

Your Content  
+ HTML: Structure  
+ CSS: Presentation  
= Your Website

A website is a way to present your content to the world, using HTML and CSS to present that content & make it look good.

# Anatomy of a website

## Concrete example

- A paragraph is your content
- Putting your content into an HTML tag to make it look like a paragraph is Structure

`<p>A paragraph is your content</p>`

- Make the font of your paragraph blue and 18pt is presentation

A paragraph is your content

# Anatomy of an HTML element

- Element
  - An individual component of HTML
  - Paragraph, Table, List
- Tag
  - Markers that signal the beginning and end of an element
  - Opening tag and Closing Tag

```
<tagName>Stuff in the middle</tagName>
```

```
<p> This is a sample paragraph.</p>
```

# Anatomy of an HTML element

- Container Element
  - An element that can contain other elements or content
  - A paragraph (<p>) contains text
- Stand Alone Element
  - An element that cannot contain anything else

<br/>  
<img/>

# Anatomy of an HTML element

- Attribute
  - Each element can have a variety of attributes
  - Language, style, identity, source
- Value
  - Value is the value assigned to a given attribute.

```
<p lang="fr">C'est la vie</p>  

```



# Doctype

The first thing on an HTML page is the doctype, which tells the browser which version of the markup language the page is using.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML  
4.01 Transitional//EN" "http://  
www.w3.org/TR/html4/loose.dtd">
```

```
<!DOCTYPE html>
```

# HTML Tag

After <doctype>, the page content must be contained between <html> tags.

```
<!DOCTYPE html>  
<html>  
  
</html>
```

# Head and Body Tags

The head contains meta information about the page.

The body contains the actual content of the page.

# Head and Body Tags

```
<!DOCTYPE html>
<html>
  <head>
    <title>Title of the page </title>
  </head>
  <body>
    The page content here.
  </body>
</html>
```

# Nesting

All elements "nest" inside one another



Whichever element **OPENS** first  
**CLOSES** last

# Paragraphs

```
<p>Paragraph 1</p>  
<p>Paragraph 2</p>  
<p>Paragraph 3</p>
```

```
<p>Paragraph 1</p> <p>Paragraph 2</p> <  
p>Paragraph 3</p>
```

```
<p>Paragraph 1</p>
```

```
<p>Paragraph 2</p>  
<p>Paragraph 3</p>
```

Paragraph 1

Paragraph 2

Paragraph 3

\* White space is only for humans!

# Headings

```
<h1>Heading 1</h1>  
<h2>Heading 2</h2>  
<h3>Heading 3</h3>  
<h4>Heading 4</h4>  
<h5>Heading 5</h5>  
<h6>Heading 6</h6>
```

**Heading 1**

**Heading 2**

**Heading 3**

**Heading 4**

**Heading 5**

**Heading 6**

\* Heading number indicates hierarchy, not size. Think: Outlines from high school papers

# Lists

```
<ul>
  <li>List Item</li>
  <li>AnotherList Item</li>
</ul>
```

```
<ol>
  <li>List Item</li>
  <li>AnotherList Item</li>
</ol>
```

Unordered list  
(bullets)

- List Item
- AnotherList Item

Ordered list  
(sequence)

1. List Item
2. AnotherList Item



# Line Breaks

```
<p>  
  Imagine there's no Heaven <br/>  
  It's easy if you try <br/>  
  No hell below us <br/>  
  Above us only sky  
</p>
```

Imagine there's no  
Heaven  
It's easy if you try  
No hell below us  
Above us only sky

\* Notice: This tag does is our first example of a stand-alone or "self-closing" element. A break can't contain anything.

# Inline vs Block

So far, we have mostly seen "block" elements

They appear on the next line, like paragraphs

There are also "inline" elements

They appear on the same line that they are written on.

# Formatted text

<p>

Here is a paragraph with <em>Emphasized</em> text and <strong>Important</strong> text.  
</p>

Here is a paragraph with *Emphasized* text and **Important** text.

\* Notice: em and strong are meant to indicate meaning through style. If you want to have italicized for appearance and not to communicate meaning, you should use CSS.

# Let's Develop It!

We are going to start building a  
personal portfolio

- Create a new file with your text editor.
- Save it with the extension .html
- Start the page with Doctype, Head, and Body
- Write a paragraph about yourself
- Add a list of your favorite things
- Feel free to experiment!

# Links

Links have three components

- Tag: <a><a/>
- Href attribute:  
"http://www.girldevelopit.com"
- Alt attribute: "Girl Develop It"

```
<a href = "http://www.girldevelopit.com" alt = "Girl Develop It Homepage">GDI</a>
```

**GDI**

# Images

Images also have three components

- Tag: `<img/>`
- Src attribute:  
"http://girldevelopit.com/assets/pink-logo.png"
- Alt attribute: "Girl Develop It logo"

```
<img src ="http://girldevelopit.com/assets/pink-logo.png" alt = "Girl Develop It Logo" />
```



# Let's Develop It

Add images and links to your portfolio!

# Tables

```
<table>
  <tr>
    <th>Head</th>
    <th>Head</th>
  </tr>
  <tr>
    <td>Data</td>
    <td>Data</td>
  </tr>
</table>
```

Head	Head
Data	Data



# Character codes

There are character codes for many different characters in many different languages

- Delta: &delta; δ
- Copyright symbol: &copy; ©
- Grave: &grave; `
- An grave a: &agrave; à

**Full list**

# Questions?

We're here to help!



