



Build Your Own Website

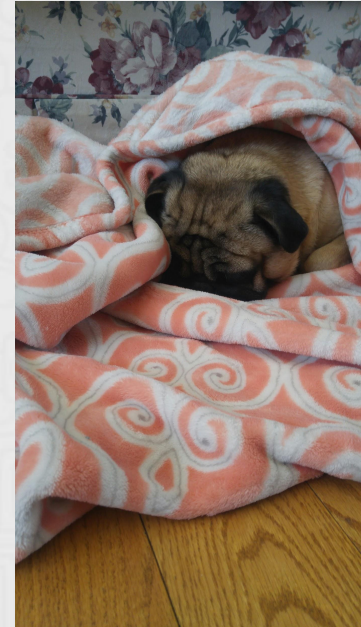
With HTML and CSS

Hosted by **Sudo**

In partnership with **Innovate Kingston**

About the Instructor - Kyla Lutz

- Third year Computer Programmer Analyst student at St. Lawrence
- Currently working for the Office of Government and Consumer Services in a program developer position
- Enjoys programming, history, and crochet
- Has a little pug named Yoda!



Setting Up

- Download a Text Editor
 - E.g. [Sublime Text 3](#), Atom, Notepad++
- Make sure you have a compatible Internet Browser
 - E.g. Google Chrome, Firefox, Safari
- In the Text Editor, make two files:
 - index.html
 - main.css

What is HTML?

- HTML = Hypertext Markup Language
- Standard for developing websites
- Describes the structure of web pages using markup
- Uses elements represented as tags
- The browser translates the code into a viewable form shown as a web page

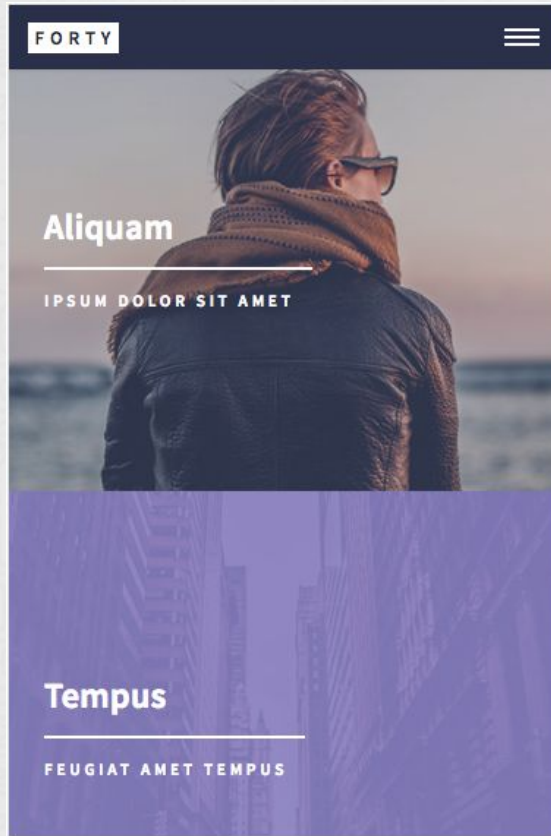
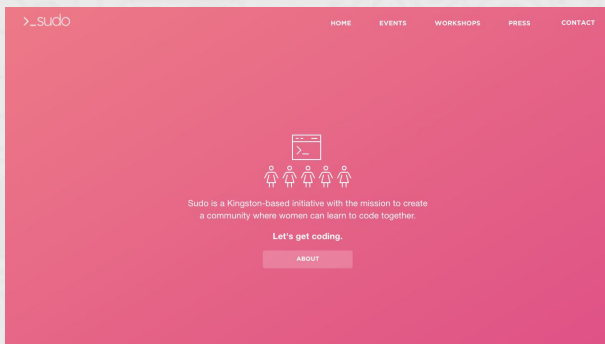
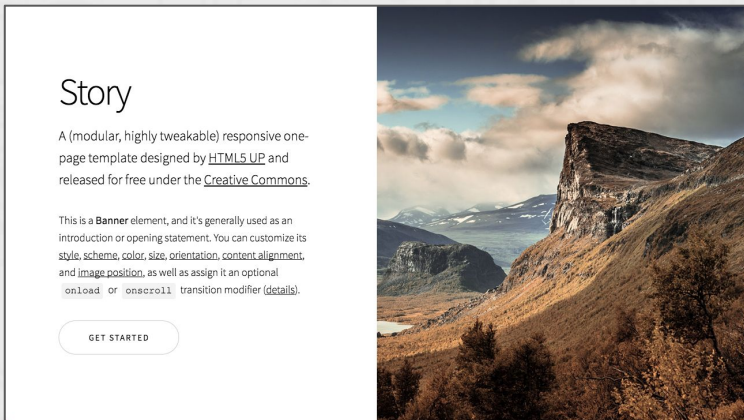
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title></title>
6  </head>
7  <body>
8
9  </body>
10 </html>
```

What is CSS?

- CSS = Cascading Style Sheets
- Standard for designing websites
- Describes how HTML elements are to be displayed on screen

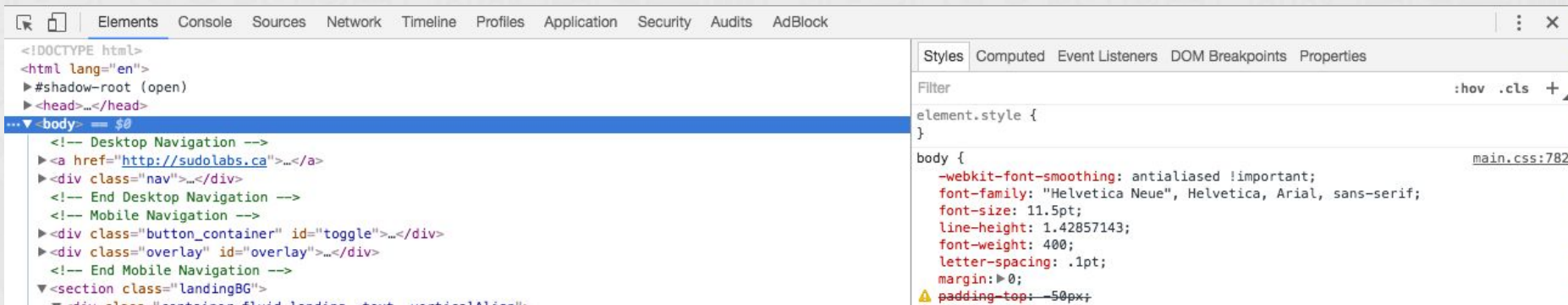
```
1  body {  
2      background: #FDD761;  
3      font-family: 'Lucida Sans Unicode', 'Arial', serif;  
4      color: white;  
5  }  
6  
7  h1, h3, h4, header .btn {  
8      font-weight: 700;  
9  }  
10  
11 h1 {  
12     margin: 100px 0 20px;  
13     text-transform: uppercase;  
14     font-size: 2.6rem;  
15 }
```


Examples of HTML and CSS



HTML and CSS in Action

- Open any website on your Browser
- Right click on the site and click “Inspect Element”
- You can see both the HTML and the CSS associated with each element!





Let's Get Started!



HTML

HTML: Important Tags

```
1  <!DOCTYPE html>
2  <html>
3  |   <head>
4  |   </head>
5  |   <body>
6  |   </body>
7  </html>
```

- **<!DOCTYPE html>** shows that this document is written in HTML5
- **<html>** describes the HTML document
- **<head>** provides information about the document. It's contents are not visible on the webpage.
- **<body>** describes all visible page content

HTML: Basic Tags

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  </head>
5  <body>
6      <h1>Hello from H1</h1>
7      <h2>Hello from H2</h2>
8      <h3>Hello from H3</h3>
9      <h4>Hello from H4</h4>
10     <h5>Hello from H5</h5>
11     <h6>Hello from H6</h6>
12
13     <p>Hello from P</p>
14 </body>
15 </html>
```

Hello from H1

Hello from H2

Hello from H3

Hello from H4

Hello from H5

Hello from H6

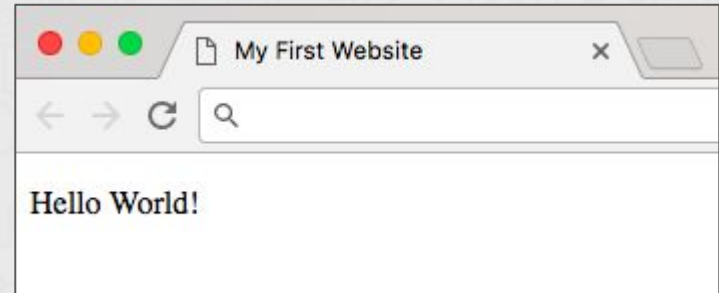
Hello from P

Try it Yourself!

- Try adding multiple `<p></p>` tags and add some content!
- Experiment with heading tags h1-h6, note variations in size

HTML: Hidden Tags

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>My First Website</title>
5  </head>
6  <body>
7      <!-- This text won't appear! -->
8      <p>Hello World!</p>
9      <!-- Neither will this -->
10 </body>
11 </html>
```



HTML: Links, Lists, and Images

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>My First Website</title>
5  </head>
6  <body>
7      <a href="https://sudolabs.ca">Sudo's Website</a>
8      
9      <p>HTML and CSS are:
10         <ol>
11             <li>Fun</li>
12             <li>Easy to Learn</li>
13             <li>For making pretty websites</li>
14         </ol>
15     </p>
16 </body>
17 </html>
```



[Sudo's Website](https://sudolabs.ca)

HTML and CSS are:

1. Fun
2. Easy to Learn
3. For making pretty websites

Try it Yourself!

- Add both an ordered list and an **unordered** list to your webpage
 - **Bonus:** Try creating a list within a list
- Add some links on your page to Google, Sudo's website, etc
- Add an image to your website
 - **Bonus:** Can you make your image link to a website?



HTML Jeopardy

The background of the slide is a light gray field filled with a dense, repeating pattern of small, white line-art icons. These icons represent various technology and design concepts, such as laptops, smartphones, lightbulbs, gears, and code symbols. In the center of this pattern, the text 'CSS' is displayed in a bold, dark purple font.

CSS

CSS: Basic Styles

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>My First Website</title>
5      <link rel="stylesheet" href="main.css">
6  </head>
7  <body>
8      <p>Hello World!</p>
9  </body>
10 </html>
```

```
1  body {
2      background-color: blue;
3  }
4
5  p {
6      font-size: 24pt;
7      color: yellow;
8  }
```

Hello World!

Google Fonts

<https://www.google.com/fonts>

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>My First Website</title>
5      <link rel="stylesheet" href="main.css">
6      <!-- Google Font Link -->
7      <link href="https://fonts.googleapis.com/
      css?family=Roboto" rel="stylesheet">
8  </head>
9  <body>
10     <p>Hello World!</p>
11 </body>
12 </html>
```

```
1  body {
2      background-color: lightblue;
3      font-family: 'Roboto', sans-serif;
4  }
5
6  p {
7      font-size: 24pt;
8      color: red;
9  }
```

Hello World!

CSS: IDs, Classes, and Divs

```
7 <body>
8   <div id="hello">
9     <p>Hello World!</p>
10  </div>
11  <div>
12    <p class="blue-text">This text is blue</p>
13    <p>This text is not blue</p>
14    <p class="blue-text">This text is blue</p>
15  </div>
16 </body>
```

```
1 body {
2   background-color: lightblue;
3 }
4
5 p {
6   color: red;
7 }
8
9 #hello {
10  background-color: pink;
11 }
12
13 .blue-text {
14   color: blue;
15 }
```

Hello World!

This text is blue

This text is not blue

This text is blue

CSS: Width and Height

```
7 <body>
8   <div id="hello">
9     <p>Hello World!</p>
10  </div>
```

```
1  body {
2    background-color: lightblue;
3  }
4
5  div {
6    border: solid 1px black;
7  }
8
9  #hello {
10   background-color: pink;
11   width: 100px;
12   height: 250px;
13 }
```

Hello World!

This text is blue

This text is not blue

This text is blue

CSS: Padding

```
7 <body>
8   <div id="hello">
9     <p>Hello World!</p>
10  </div>
```

```
1  body {
2    background-color: lightblue;
3  }
4
5  div {
6    border: solid 1px black;
7  }
8
9  #hello {
10   background-color: pink;
11   padding: 10px;
12 }
```

Hello World!

This text is blue

This text is not blue

This text is blue

CSS: Margins

```
7 <body>
8   <div id="hello">
9     <p>Hello World!</p>
10  </div>
```

```
1  body {
2    background-color: lightblue;
3  }
4
5  div {
6    border: solid 1px black;
7  }
8
9  #hello {
10   background-color: pink;
11   margin: 10px;
12 }
```

Hello World!

This text is blue

This text is not blue

This text is blue

Try it yourself!

- Use an ID to make a specific paragraph red (or any color of your choosing)
 - **Bonus:** you can use hexadecimal values too! Google “colour picker” and copy and paste the hex value
- Increase the font size of a specific paragraph
- Assign a background color to another paragraph
- Resize an image using width and height

HTML and CSS: General Style Tips

I am sans.
I am serif.

New Link
Visited Link



Hex: # 7F00FF

Red: 127

Green: 0

Blue: 255



The background of the slide is a light gray field filled with a dense, repeating pattern of small, white line-art icons. These icons represent various technology and digital concepts, such as smartphones, laptops, lightbulbs, speech bubbles, and network symbols. The pattern is uniform and covers the entire area above a solid purple horizontal bar at the bottom.

CSS Jeopardy

Want to Learn More?

Check out:

[**https://www.codecademy.com/learn/web**](https://www.codecademy.com/learn/web)

[**https://www.w3schools.com/**](https://www.w3schools.com/)

Or email us at [**workshops@sudolabs.ca**](mailto:workshops@sudolabs.ca)

Thanks for Joining Us!

Follow our Social Media accounts to stay up to date with upcoming events:

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Twitter: [https://twitter.com/**sudolabs**_](https://twitter.com/sudolabs_)

Facebook: [https://fb.me/**sudolabs**.ca](https://fb.me/sudolabs.ca)

Instagram: [https://www.instagram.com/**sudolabs**](https://www.instagram.com/sudolabs)

Survey Link: [https://goo.gl/forms/**S8GVLf5FeW1WPBmu2**](https://goo.gl/forms/S8GVLf5FeW1WPBmu2)