

Web Dev Day 1: Intro to HTML

Website Development
UBC | Coding Pals

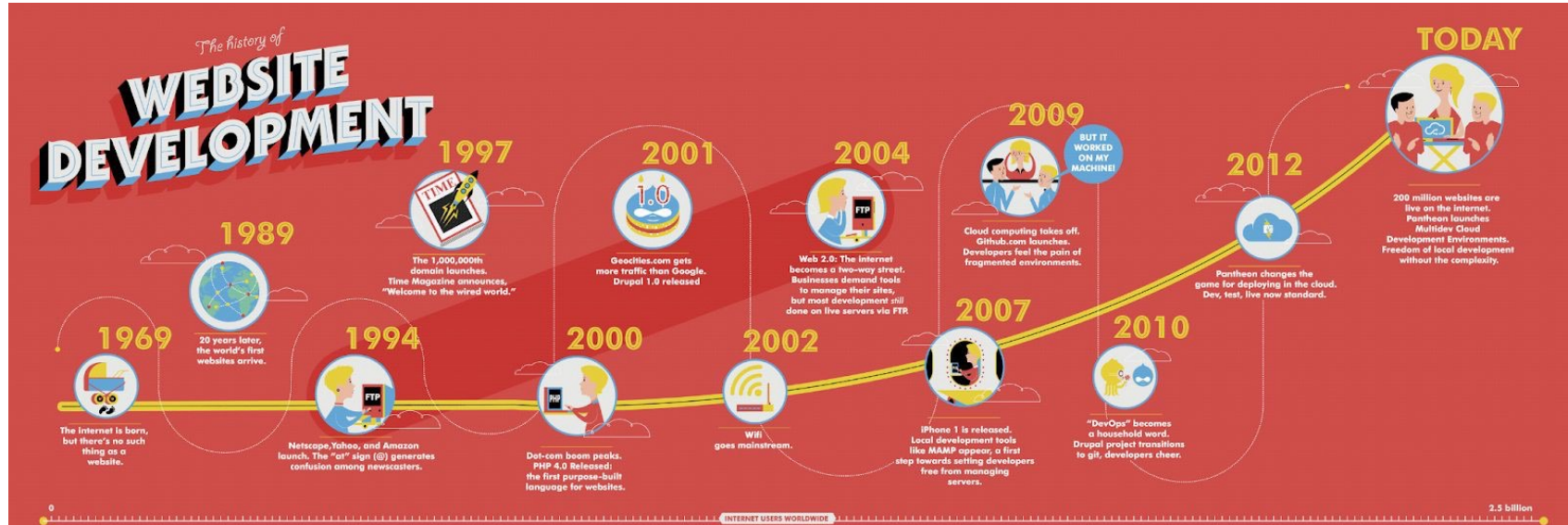
What is the Web?

The Web started as “Internet”, where it was only a group of computers that were connected together to transfer information, but as more and more computers join this “Internet”, the World-Wide-Web (www), a collection of websites linked together, was formed.



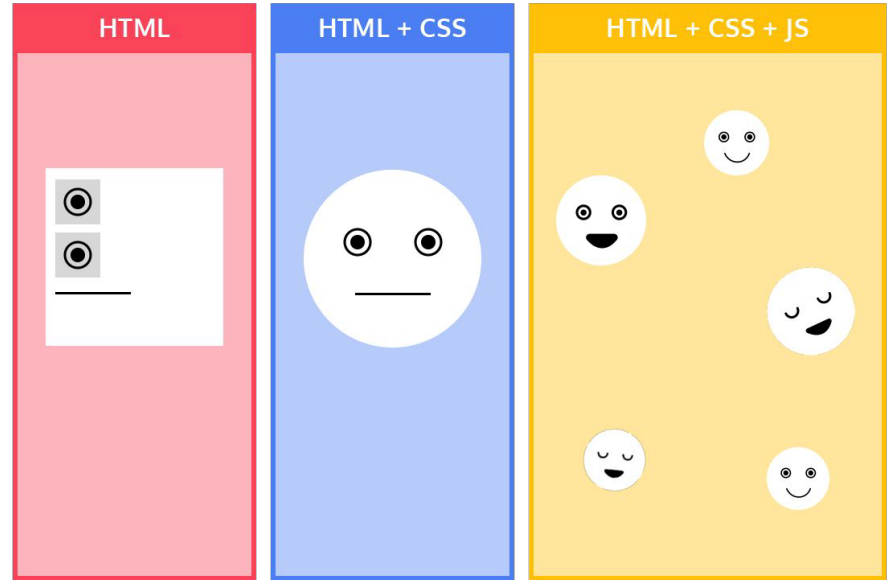
History of Web Development

- The Internet (The group of linked computers) was created in 1969.
- The first website was created in 1989.



Languages of the NET

- HyperText Markup Language (HTML)
- Cascading Style Sheets (CSS)
- JavaScript (JS)
- Structured Query Language (SQL)



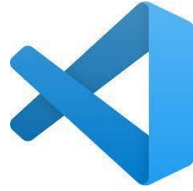
Frameworks



Function of Browsers

- Developer Console
- F12
- Compiling Code retrieved from servers

Setting up VS Code



Step 1: Go to <https://code.visualstudio.com/>

Step 2: Install the correct “Stable Build” for your operating system (should auto-detect)

Step 3: Open the file that was just installed and finish the setup process

Code editing.
Redefined.

Free. Built on open source. Runs everywhere.

Download for Windows

Stable Build



Code editing.
Redefined.

Free. Built on open source. Runs everywhere.

Download Mac Universal

Stable Build






VS Code Extensions



Auto Rename Tag v0.1.10

Jun Han | 9,914,147 | ★★★★★ (158)

Auto rename paired HTML/XML tag

Disable Uninstall   




This extension is enabled globally.



IntelliCode v1.2.22

 Microsoft | 20,662,172 | ★★★★★ (75)

AI-assisted development

Disable Uninstall   




This extension is enabled globally.



Prettier - Code formatter v9.5.0

Prettier | 23,147,065 | ★★★★★ (347)

Code formatter using prettier

Disable Uninstall   




This extension is enabled globally.



Live Server v5.7.5

Ritwick Dey | 24,005,128 | ★★★★★ (377)

Launch a development local Server with live reload feature for s

Disable Uninstall   

This extension is enabled globally.

What is HTML?

- Hyper Text Markup Language
- Describes the structure of a Web page & tells the browser how to display the content
- The standard markup language for creating Web pages



What is Syntax?

- Syntax varies from language to language
- Set of rules that defines how a computer reads code
- Proper syntax must be used for a program to run

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Example</title>
5     <link rel="stylesheet" href="sty
6   </head>
7   <body>
8     <h1>
9       <a href="/">Header</a>
10    </h1>
11    <nav>
12      <a href="one/">One</a>
13      <a href="two/">Two</a>
14      <a href="three/">Three</a>
15    </nav>
```

```
9  body {
10    font-family: "Trebuchet MS", Arial, Helvetica, sans-s
11    color: #000;
12    background-color: #66B034;
13    margin: 0px;
14    padding: 0px;
15  }
16  #container {
17    width: 840px;
18    margin-top: 0px;
19    margin-right: auto;
20    margin-bottom: 0px;
21    margin-left: auto;
22  }
```

HTML Syntax

- Opening & closing tags (<> </>)
- Always contains:
 - <!DOCTYPE html>
 - Opening & closing <html> tags
- Indented tags (for readability)
- Child & Sibling tags
- Order of sibling tags matters
- Attributes

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>My First Heading</h1>
    <p>My first paragraph.</p>
  </body>
</html>
```

HTML Head Section

- Meta tags
- Title tags
- Link tags
- Additional attributes & properties

```
<head>
  <meta charset="UTF-8">
  <title>Amazing CodingPals Website!</title>
  <link rel="stylesheet" href="styles.css">
</head>
```

HTML Body Section

Header Tags

(not to be confused with *head* tags)

- <h1>, <h2>, <h3>, <h4>, <h5>, <h6>
- Used to indicate Title/ Header elements
- 6 Different styles to indicate header types: Titles, Subtitles, Paragraph Titles, etc.

Header 1

Header 2

Header 3

Header 4

Header 5

Header 6

Paragraph Tags

- Denoted with <p>
- Used to write paragraphs or any long text
- Always starts on a new line

```
<body>

  <h1> Here is my header1 tag!</h1>
  <h6> Here is my header6 tag!</h6>

  <p>Here is my paragraph tag!</p>

</body>
</html>
```

Here is my header1 tag!

Here is my header6 tag!

Here is my paragraph tag!

Bold, Italic, Highlight, and Underline Tags

- ``, ``, `<mark>`, `<u>`
- `` for Bold
- `` for Emphasize
- `<mark>` for Mark
- `<u>` for Underline

Bold

Italic

Underline

Highlight

Anchor (Hyperlink) Tags

- Denoted with the <a> tag
- Used to link to different websites (also can link to images, but not very common)
- Can nest other tags
- Href attribute
 - Href must start with 'https://'
- Target attribute

```
<body>  
  
  <a href="https://google.com" target="_blank"><h1>Google</h1></a>  
  
</body>
```

Google

Single Tags

Breaks, horizontal rule

Underline Highlight

<hr>

Underline
Highlight

No closing tag (</>)

Underline

Highlight

Big and Small Tags

- Gives a slight font increase/decrease to text
- Nested inside text elements
- Can be used to manipulate specific words
- Denoted with <big> and <small>

```
<body>  
  <p>This word is <big>Big</big> while this word is <small>small</small></p>  
</body>
```

This word is **Big** while this word is small

Subscript and Superscript Tags

- Denoted with <sub> and <sup>
- Notice how a space is necessary before "is" on the second line

```
<p>Water is also known as H<sub>2</sub>O</p>
```

```
<p>2<sup>4</sup> is equal to 16</p>
```

Water is also known as H₂O

2⁴ is equal to 16

Lists

- Unordered () vs. Ordered ()
- Individual elements denoted by
- Attribute to define type of ordering
- Notice the indents

Unordered List:

```
<ul>
  <li>item 1</li>
  <li>item 2</li>
  <li><a href="https://google.com">item3</a></li>
</ul>
```

- item 1
- item 2
- item3

Ordered List:

```
<ol>
  <li>item 1</li>
  <li>item 2</li>
  <li><a href="https://google.com">item3</a></li>
</ol>
```

1. item 1
2. item 2
3. item3

Comments

- Comments refer to lines of text that are not read by the computer when compiling the code
- Can be used to edit and quickly manipulate code without deleting it and retyping it
- Can be used to leave notes and explanations of a certain block of code

```
<!DOCTYPE html>
<html lang="en">
<body>

    <!-- <h1> My First Heading</h1>
    <p> My First Paragraph</p> -->

    <h1> My Second Heading</h1>
    <p> My Second Paragraph</p>

</body>
</html>
```

Challenge Time!

Challenge:

Make a basic About Me webpage with a title in the head section, a page title header, a subtitle for a list of things you are interested in, and a list (ordered or unordered) with 5-15 things that you like

Don't worry about formatting or styling—we will continue with this page next day

Homework

Brainstorm ideas & pages that you want to put onto your website. Keep track in a written document with all the components & content you want to add.

This will be crucial as we slowly build on your personal websites and finally develop and make your unique websites.