Coding for the internet

Tools for use: It's not as overwhelming as you think

We are all now connected by the Internet, like neurons in a giant brain.

- Stephen Hawking-

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Very brief history of the Internet

1960’s
"Packet Switching" - One of the first methods for effectively transmitting electronic data. This would become a major building block for the internet.

ARPANET - Funded by the U.S. Department of defense. Relied on packet switching, which allowed multiple computers to communicate on a network.

1970’s
Robert Kahn & Vinton Cerf develop TCP/IP. This set communication standards for data transmission on networks.

1980’s
ARPANET adopts TCP/IP. Through this researchers begin to assemble a "network of networks" that went on to form the modern Internet.

1990’s
Tim Berners-Lee invents the World Wide Web.
Technical Jargon:

Hypertext Markup Language is the standard markup language for creating web pages and web applications.

CSS (Cascading Style Sheets) is a style sheet language used for describing the presentation of a document written in a markup language like HTML.

JavaScript, often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.

Normal Language:

HTML is the backbone of building a webpage

CSS is used to control the layout and style of the web pages.

Javascript is used to program the behavior of web pages

```html
<!DOCTYPE html>
<html>
<body>

</body>
</html>
```

```css

body {
  background-color: lightblue;
}

p{
  font-family: verdana;
  font-size: 20px;
}

</style>
</head>

<button type="button"
onclick="document.getElementById('demo').innerHTML = Date()">
Click me to display Date and Time.
</button>

<p id="demo"></p>
```
**PHP: Hypertext Preprocessor** is a server-side scripting language designed for web development but also used as a general-purpose programming language.

**Bootstrap** is a free and open-source front-end library for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

**Javascript** has grown to include what are called libraries. A JavaScript library is a library of pre-written JavaScript which allows for easier development of JavaScript-based applications, especially for AJAX and other web-centric technologies. jQuery is one example of javascript library.
Learn and Study

- Codecademy
  https://www.codecademy.com/learn
- freeCodeCamp
  https://www.freecodecamp.org/
- Code.org
  https://code.org/learn
- w3schools
  https://www.w3schools.com/default.asp
- MDN web docs

Responsive Design

In a study by the Pew Research Center 77% of American own a smartphone. 53% of American also own a tablet device. Because of this we now create websites for mobile devices first. It is easier to start a design for mobile and work your way up, in terms of screen size.

Content Management Systems

Content management systems are popular with schools and libraries. They provided web hosting and the tools you need to get your website up and running. These systems are also user friendly and don’t require you to know a lot about coding. But if you do know HTML, CSS and or Javascript then you can open up even more ways to customize your web pages. An added bonus is that they automatically keep you up to date on the latest web standards.
References


Resources

https://www.codecademy.com/learn
https://www.freecodecamp.org/
https://code.org/learn
https://wordpress.com/
https://www.springshare.com/
https://www.drupal.org/