

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

Mid to late 1900's

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.

Normal Language:

HTML is the backbone of building a webpage

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

</body>
</html>
```

Technical Jargon:

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

Normal Language:

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

```
<style>
body {
background-color:
lightblue;
}

p {
font-family: verdana;
font-size: 20px;
}
</style>
</head>
```

Technical Jargon:

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:

Javascript is used to program the behavior of web pages

```
<button
type="button"
onclick="document.ge
tElementById('demo')
.innerHTML = Date()">

Click me to display
Date and Time.
</button>

<p id="demo"></p>
```




Additional Languages

HTML, CSS and Javascript have evolved and expanded to provide more flexibility in creating web pages. Other languages have been developed as well.

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

<https://developer.mozilla.org/en-US/>

Future-proof your knowledge

Keep up to date with the changes to HTML, CSS and Javascript. These three languages are not going away. They will just be improved over time.

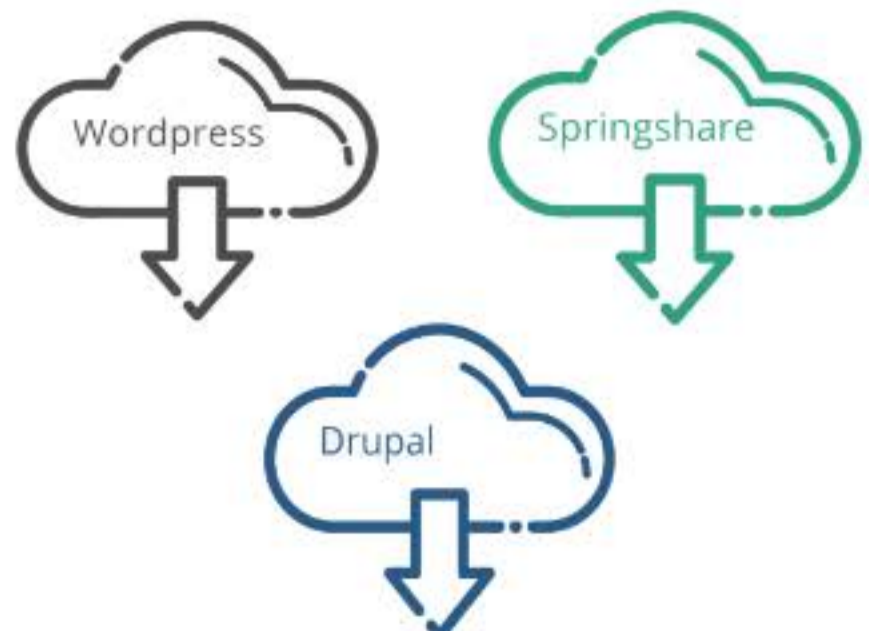
Responsive Design

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

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Get Bootstrap (2018, May 01). Retrieved from <https://getbootstrap.com/docs/4.1/layout/overview/>

JavaScript Library (2018, May 01). Retrieved from https://en.wikipedia.org/wiki/JavaScript_library

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/>