

Module 3: JavaScript

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Introduction

Static vs. Dynamic Webpages

- A dynamic webpage is one that allows interaction and can provide feedback to the user based on input. This is in contrast to a "static" page which simply displays content to the user.

The Value of JavaScript to Our Websites

1.HTML alone is static

2.HTML is NOT a Programming Language, instead, it's a markup language using tags

3.What can a programming language do that HTML can't?

- Take steps and actions in a sequence
- Do things repetitively A loop
- Make decisions based on data

4.JavaScript is a programming Language

JavaScript Basics: Fundamental Syntax

1. tag: `<script></script>`
2. "=" is the assignment operator in JavaScript
3. ";" is used to end JavaScript statements
4. in `<head>` , write: `<script type="text/javascript">`
5. function, var, document, getElementById(""), value, innerHTML
6. the grammar is in 1.html

Using Alerts and Prompts

1. Alert provides some textual feedback to the user about something in the form of a pop-up window.
2. using the type property can restrict a user's input, for example requiring a number value instead of text.
3. An alert simply displays a message to the user, where as the prompt actually asks the user for some sort of input.

Events

- Event onBlur allows some action to happen when the user clicks away from a form field or other element that they had just previously been in. It's useful for providing feedback to a user based on their input - in a way, it can be used as a less obtrusive form of an alert for certain things.
- Event onLoad executes some JavaScript instructions when a webpage loads.

Gathering Additional User Input and Dynamically Modifying HTML

Testing JavaScript

Reading: JavaScript Additional Resources

- W3 Schools JavaScript Tutorials: <http://www.w3schools.com/js/>
- HTML Goodies JavaScript Primer: <http://www.htmlgoodies.com/primers/jsp/article.php/3586411>
- Jake Wright: Learn Javascript in 12 Minutes: https://www.youtube.com/watch?v=Ukg_U3CnJWI
- Beginner JavaScript Tutorial: <https://www.youtube.com/watch?v=yQaAGmHNn9s>
- Eloquent JavaScript: <http://eloquentjavascript.net/>
- Codecademy: JavaScript Tutorials: <https://www.codecademy.com/learn/javascript>