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JavaScript versus JAVA

JAVA is a strongly typed, compiled programming language developed by Sun Microsystems. JavaScript, developed originally by Netscape, is a lightweight, interpreted programming language initially called LiveScript. The two languages are not related in any way. All programming languages share a certain amount of similarity.

Interpreted programs versus Compiled programs

Before we start discussing the differences between interpreted and compiled we have to define the term source code or as it is more commonly referred to, the code. The code is the plain text commands that the program is written in. All programming languages start out as source code, it is then either interpreted or compiled. The code that you will create in this course can be considered source code.

Interpreted programming languages tend to be simpler to program but slower to execute in general. Each time a program is run it has to be interpreted line by line, based on the flow of execution.

Compiled programming languages have a more complex syntax, and require more strict programming practices. With a compiled programming language you first write the source code, then you feed it to a compiler which produces an executable binary program. On the Windows platforms the output of the compiler usually ends in the ".exe" file extension. The program that comes out of the compilation process tends to be platform (operating system) specific. The key benefit for the programmer is that no other programmer can look at the source code once it is compiled. The other key factor is that the language used to write the source code becomes irrelevant once it has been compiled.

JAVA is a compiled language that is platform independent, whereas JavaScript is an interpreted language. The browser provides the platform independence for JAVA through its JAVA Virtual Machine, and the interpreter for JavaScript. As a result, the browser you are writing your scripts for is important.

Why Learn JavaScript

JavaScript is the popular scripting language currently supported by web browsers. JavaScript can also be used on web servers for what's called server side scripting as well. The time you invest into learning the JavaScript language will provide you with what is now considered to be a core skill for web development.

What you can use JavaScript for

JavaScript can extend the usefulness of your web pages beyond what you can do with just HTML. In this course you will use it to ensure that a user is inputing data into your forms in the correct format, to create interesting buttons with mouse rollover effects, and to create pop-up windows. When combined with Cascading Style Sheets, you can create what are called Dynamic HTML pages. By learning JavaScript your needs and imagination will lead you to extend your HTML pages.

About JavaScript

JavaScript is an interpreted programming language that can be embedded into an HTML web page. Interpreted means that the entire web page is downloaded to the browser and the JavaScript code is executed when an event is triggered. When the code is executed it is interpreted one line at a time. There are a number of events that will trigger the execution of a JavaScript, like a click on a form button, or the completion of a web page loading.

Netscape originally created JavaScript. Today there are several versions of JavaScript and the language is continually developing as both the Internet and the web evolve.