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| There are two ways you'll be running your JavaScript code: 1) In the context of an HTML document, where you use the 'script' tag to link it to your HTML file, and 2) inside the terminal using node.js to run the code. | In-browser JavaScript is able to: add new HTML to the page, change the existing content, modify styles, react to user actions, run on mouse clicks, pointer movements, key presses, send requests over the network to remote servers, download and upload files (so-called AJAX and COMET technologies), get and set cookies, ask questions to the visitor, show messages, and remember the data on the client-side (“local storage”). |
| Statements are the instructions of a computer program – they are executed by the computer and perform some action or computation. | There are at least three great things about JavaScript: 1)Full integration with HTML/CSS. 2) Simple things are done simply. 3) Support by all major browsers and enabled by default. JavaScript is the only browser technology that combines these three things. That’s what makes JavaScript unique. That’s why it’s the most widespread tool for creating browser interfaces. |
| There are two types of values that Javascript defines: fixed and variable. | A boolean is either the value true or false. |
| A(n) array is a collection of other types of data, defined with a set of square brackets. | JavaScript was initially created to “make web pages alive”. The programs in this language are called scripts. They can be written right in a web page’s HTML and run automatically as the page loads. |
| Variables in any programming language are used to store data values for a later time. | Here are some examples of declaring variables to several different things... Within each variable decleration the equal sign ( = ) is known as the assignment operator. |
| Here are some examples of declaring variables to several different things... Within each variable decleration the equal sign ( = ) is known as the assignment operator. | A function is a named procedure that performs a specified service, and is not the same thing as a variable. |
| As seen in the picture, JavaScript uses a variable- and function-naming convention called "camelCase". This means that anytime you're naming a variable or a function in your code, you separate the "words" of your variable or function name by capitalizing the first letter of each new "word." | Today, JavaScript can execute not only in the browser, but also on the server, or actually on any device that has a special program called the JavaScript engine. |
| JavaScript ignores whitespace, which means you could write your entire JavaScript program on a single line and it would work just the same as if you spaced it out in a more readable way. Since it's nearly impossible to write a program this way, much less read a program like this, you should do everything you can to make sure your JavaScript is clearly and logically indented. We will be adopting a 4-space indenting convention as seen in the picture, although it is also very common to see a 2-space convention. | |

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| Arrays help us collect multiple other data types together. They're best used as a "collection of many things", and in JavaScript they can contain any combination of other primitive or complex data types. | Where arrays are a way to represent a collection of many things, objects are great for representing one thing in a lot more detail. |
| Javascript engines are complicated. But the basics are easy. The engine (embedded if it’s a browser) reads (“parses”) the script. Then it converts (“compiles”) the script to the machine language.And then the machine code runs. The engine applies optimizations at each step of the process. It even watches the compiled script as it runs, analyzes the data that flows through it, and applies optimizations to the machine code based on that knowledge. When it’s done, scripts run. | |
| Reserved words are words that the compiler will look for when interpreting your code and has attached special meaning to. You can't use these words as the name of your variables or functions or it will cause an error. |  |
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