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Web & Internet Programming

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HW #4

1. Javascript is a scripting language that allows you to dynamically update a webpage while it is being viewed in the browser. Javascript allows you to access and modify content while also creating program rules and reacting to events. An interpreted program language means that the program’s instructions will be read and executed by another program. In comparison, compiler programs will compile the code and express the instructions of the target machine. Some of the benefits of using an interpretive program include having the capability of dynamically changing code without a compiler stage.
2. A var element can be redefined and updated. They also may act as global variables unless they are placed within a function block, in which case they’ll act as local variables. Let will define a variable that can be updated but not redefined. It will also be locally scoped to the block that it is placed in. Const variables cannot be redefined or redeclared. They are also scoped to the block they are defined in.
3. An anonymous function is a function that has no name. This can be achieved by placing the function in the position where an interpreter would expect an expression. One example is below:

var area = function(width, height) {

return width \* height;

}

A higher-order function is a function that accepts functions as parameters and/or returns a function.

1. An object groups together a set of variables and functions to create a model of something you would recognize from the real world. In an object, variables become known as properties and functions become known as methods. One key difference between javascript and other OOP languages is the use of this as a keyword. The ‘this’ will refer back to the default object defined in the global scope. It can be used within a function to refer to properties and methods defined in the object that was declared in the global scope. Objects in java are also different because they are optional.