Week 4 Research Assignment by Jason Naggles

Explaining the difference between var, let and const

Whether declaring a globally or function-scoped variable with an option to initialize it to a value, the var statement can do this concept. The original value of the variable can change. You can declare a var inside a function with it as well as outside a function. Duplicating variable declarations while using var will not cause an error. The variable does not lose its value. However, it will lose its value if another assignment is rung. A var can also be hoisted, meaning that a variable declaration can be added to the top of a function or global code.

A let statement allows a programmer to delcare values that are limited within a block scope. On the other hand, a var statement can either declare a variable locally in a function or globally meaning outside a function with no block scope. Unlike var, a let statement can be non-hoisted. This means that a variable declaration is not at the top of a function or global code.

In a const statement, the value cannot be changed or reassigned. In an array, the properties can be modified or deleted. A declaration of const is created globally or locally to a block scope to which it is declared. The declaration has a read-only connection to a value.

How does a promise work?

In JavaScript, a promise is an object that has two parts. A code that takes time to develop is known as producing code. A code that involves waiting for the result is known as consuming code. When these parts are combined, they form a promise. A promise has two properties. A state and a result. When a promise is processing or developing, the result is undefined. If a promise is

successfully received, then a result value is presented. If a promise is declined, then the result is an error.

- 1. Definition and explanation of a var statement: https://developer.mozilla.org/en-us/docs/Web/JavaScript/Reference/Statements/var
- **2.** Definition and explanation of a let statement: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/let
- **3.** Definition and explanation of a const statement: https://developer.mozilla.org/en-us/docs/Web/JavaScript/Reference/Statements/const
- 4. How does a promise work in JavaScript: https://www.w3schools.com/js/js promise.asp