Week 2 Research

Prompts

• What are the different loops JavaScript provides us with?
• What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.
• What is the syntax of another one of the loops in your above answer? How and when should you use this loop? Give an example.
• What is the syntax of another one of the loops in your above answer? How and when should you use this loop? Give an example.
• What is your favorite thing you learned this week?

Instructions
As developers, research is a constant part of our job. A common saying is that 90% of software development is Googling, and while that is an exaggeration, Google is a highly used tool in the role. This Research assignment is meant to go beyond the course curriculum and increase your understanding of relevant topics while exposing you to online resources you'll frequently use on the job. Please write a paragraph for two (2) of the above prompts and include URLs from where you found the information to cite your sources. Do not copy and paste text from the internet or any other source; use the information you find in your research, summarize, in your own words, the concepts. Plagiarism will result in a zero for the assignment as well as disciplinary actions.

This assignment is graded based on participation.

Sources:
1.   https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Loops_and_iteration

Prompts:
• What are the different loops JavaScript provides us with?
• What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.

Research:
　　　JavaScript provides 8 types of loop statements. Each has a very similar function, which is iteration, but very different approaches and therefore very different results. There are a few key tools that do not specifically present like the other loops, but aid in the process of iteration, and therefore should be defined as being loops. Those are the Labeled statement, Break Statement, and the Continue Statement. These statements are essential loop tools.
The types of loops are as follows:
1.   for statement
2.   do...while statement
3.   while statement
4.   for...in statement
5.   for...of statement
6.   labeled statement
7.   break statement
8.   continue statement

The For Loop is used to iterate a specified number of increments over a condition until the condition has been achieved or fails. A for loop should be used to access items within an array.

The syntax of a For Loop:
```
for ([initialExpression]; [conditionExpression]; [incrementExpression])
  statement
```

```
let count = '';

for (let i = 0; i < 5; i++) {
  count = count + i;
  console.log(i, count);
}

console.log("count = " + count);
// expected final output: "count = 01234"
```

All Iterations:
```
> 0 "0"
> 1 "01"
> 2 "012"
> 3 "0123"
> 4 "01234"
> "count = 01234"
```