Week 1: Research**

1.What is git?

GIT is THE most popular version control system amongst Web Developers. This VCS records changes to data base (repository). This repo records different changes completed by different users. This tool allows different users to make changes to the files. GIT is a distributed system, which is a huge benefit compared to a centralized system which flaws when server is down.

Why is it useful?

GIT is super useful because it is great got working together and if something is wrong, we can always go back to previous versions. It allows every member to keep copies with it's history in their computer and save snapshots(commit) of project locally. It is one of the essential tool that almost 90% of Web Developers in the world use.

What is the git workflow?

From what I understand first we have the files/projects commit (snapshot) them to the Index which it's like a stagging area to edit (fixes) and possibly make changes to the files. Then these get committed and pushed to the repo where it is stored.

(Source: (130) Git Tutorial for Beginners: Learn Git in 1 Hour - YouTube)

2. What data types do we have access to in JavaScript?

There are (from what I understand) 8 data types that are available to us.

- 1. Numbers
- 2. Symbols
- 3. Objects
- 4. String
- 5. Bigint
- 6. Boolean
- 7. Undefined
- 8. Null

What makes them each unique?

Numbers is capable of storing positive floating-point numbers, as well as negative floating-point numbers. The symbol type data structure is unique and immutable (unable to be changed over time) basic value. Objects are the only mutable values, which is one that can be changed without creating an entirely new value. The string type represents textual data. BinInt type can represent numbers with unspecified value. It can be safely store and operate on large numbers even beyond the fase integer limit. Boolean is represented by logical entity of 2 values: true and false. Undefined indicated the absence of value while null indicates the absence of object.

What values can they hold?

- 1. Numbers an integer or a floating-point number. Can include decimal and negative value (-)
- 2.Symbols- data types whose instances are special character and immutable.
- 3. Objects are key-value pairs of collections of data () {} []
- 4. Strings, probably the most important, text data. Direct command
- 5.Bigint an integer (of a constant or other quantity) of unspecified value.
- 6.Boolean it's the simplest I believe, any 2 values true or false.
- 7. Undefined is a data type which it's variable isn't initialized
- 8. Null zero quantities; nothing.

(Source: (130) #5 Data Types in JavaScript - 1 | JavaScript Tutorial - YouTube)

3. What is your favorite thing you learned this week? My favorite part was Friday after the office hours with Kristina, a lot of my questions were answered. I was able to grasp some concepts on how to process repos and we also spoke a bit on VSC; excited yet terrified would describe me currently. I was so happy when I was able to commit/push to my repo.