

DWA_01.3 Knowledge Check_DWA1

1. Why is it important to manage complexity in Software?

Modularity: if code is designed in smaller less complex sections we can reuse code in other problems

Readability- code needs to be readable. You might not be the only one using the code and other people should be able to pick up from where you left off.

Errors- managing complexity should result in less catastrophic errors

2. What are the factors that create complexity in Software?

Rushed code- sometimes you have a short time to finish all your code. You don't take the same amount of time needed to manage the codes complexity

Unusual naming conventions- Naming things in unconventional ways or without having descriptive variables or functions could make your code hard to follow

Lack of documentation: If functions and variables are not named in a way that is simple to follow then there should be some documentation that explains what is happening.

Long Functions: breaking functions into smaller functions will make your code far more readable

3. What are ways in which complexity can be managed in JavaScript?

Modularization, Pure Functions, higher order functions, factory functions, inline comments and documentation

4. Are there implications of not managing complexity on a small scale?

You might wish to use some of the code you have made in a later project and if you don't manage its complexity it will take a lot more work to refactor this code to work in the new project.

5. List a couple of codified style guide rules, and explain them in detail.

Using let and const instead of var - const and var are both block scoped so they only work within the block they are assigned to. This will reduce the chance of errors being created

const UPPERCASE- write const variables at the top of your code in full uppercase. This will help other Devs know that it is important and shouldn't be changed or removed

verbFirstFunctions - always use the verb first when writing what a function does countSheep() findWaldo() filterWater(). This helps the code to become far easier to read.

6. To date, what bug has taken you the longest to fix - why did it take so long?

I had a bug where I could not drag a div even though it had draggable turned on. I spent about 2 weeks watching tutorials and rewriting my code. It turned out I was in responsive mode in developer mode. This doesn't support dragging.
