

DWA_01.3 Knowledge Check_DWA1

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

Managing complexity in software is important because it makes the code easier to understand, reduces errors, saves time and money, and helps create software that works well and can adapt to changes easily.

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

Factors that create complexity in software are not having variable names that are easy to understand, using `const` when you were supposed to declare a variable as `let`, and not adding comments to your code so that the next person can easily read and understand the code.

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

- Adding comments to your code
 - Breaking your code into small manageable parts.
 - Structure and format your code so that it does not become confusing
 - Writing meaningful variable and function names that will be able to be understood at a glance.
 - By regularly practicing coding so that it can be easy to simplify complex problems.
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4. Are there implications of not managing complexity on a small scale?

If complexity is not managed it makes code hard to understand, leading to problems when debugging and fixing it.

It results to wasted time and creates frustration when the code gets to a huge scale

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

Consistent indentation and formatting - this is crucial for code readability and maintainability. This rule ensures that developers follow a consistent style throughout the codebase. Typically, spaces or tabs are used to indent code blocks.

Descriptive and meaningful variable naming - Using descriptive and meaningful names for variables, functions, and classes is a best practice. This rule encourages developers to choose names that accurately describe the purpose or usage of the entity.

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

A bug that took me a while to fix was importing a js file correctly, for the IWA capstone I was supposed to import an already provided data.js file to a script.js file and when importing i left out ".js" and wrote "data" and my book connect did not work until on the last day.
