DWA_01.3 Knowledge Check_DWA1

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

It is important to manage complexity so that writing code is not time consuming, and it is easier for the next person to understand and read and so that it is easier for yourself as well. Managing complexity also ensures the smooth running of code and avoids too many bugs from appearing as well as preventing you from becoming too overwhelmed by everything.

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

Code readability can create complexity if you are not able to understand what you wrote or what someone else wrote. Naming conventions of variables and functions, code format and the way it is being written can also create complexity.

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

Writing code in a clear and readable manner, writing code in a reusable way, making use of abstraction and leaving comments to explain what the code does can help manage complexity in JavaScript. You can also use better naming conventions so that it is clear what each aspect of the code does.

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

Yes, the code might not work the way you intended it to, the code could also be difficult to read and understand if it is not managed and you may introduce complications later down the line as you add more and more code to your file.

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

   1. Clarity: The code's purpose and rationale is clear to the reader.

2. Simplicity: The code accomplishes its goal in the simplest way possible.
3. Concision: The code has a high signal-to-noise ratio.
4. Maintainability: The code is written such that it can be easily maintained.
5. Consistency: The code is consistent.

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

One of the bugs that have taken me the longest to fix is trying to figure out why a data grid was not displaying, and it took me so long to fix because I didn't have all the information I needed in order to start investigating the root cause of the problem.

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