DWA_01.3 Knowledge Check_DWA1

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

Improve collaboration, reduce errors, ease of maintenance, ease of debugging, adaptability to change, cost effectiveness, code readability, and enhanced code scalability.

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

Programming is complex on its own, software or code evolution due to requirements that might change, technical debt, and system complexity.

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

Object oriented programming
Modularization
Abstraction
Using style guides
Polymorphism

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

Yes, implications include:
Resistance to change adaptability, long-term reusability, frustration, difficult to incorporate or collaboration, and security vulnerabilities.

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

1. Use of descriptive variables - variables should be descriptive of what they represent and its purpose.
2. Consistent indentation and syntax formatting - proper indentation helps in indicating code blocks that are on the same scope within the code, while syntax

formatting focuses on the readability of the code in terms of spacing, the variables in the code which are formed out of composite terms.

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

If it is not the braces ‘()’ after a built-in function it should have been a comma. I think it took so long because of the level of abstraction my thoughts were operating on which were more focusing on the logic other than the accuracy of the correctness of the built-in functions which I used.
