

# DWA\_01.3 Knowledge Check\_DWA1

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

It is to enhance maintainability and readability. It helps developers understand, edit and modify code efficiently which reduces errors and improves the overall software quality.

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

Poor design and insufficient documentation can lead to editors not understanding code, bugs, or other small or major problems.

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

By using correct naming conventions, formatting, simple code review, objects and classes to neaten code, reduce redundancies, error handling, correct testing.

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

Small scale complexities may lead to confusion, errors, and difficulties in maintaining or extending the code and or sauce which could lead to wasted time and resources to fix issues, bugs and errors.

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

Simple Indentation and Formatting:

Making sure that the formatting of loops, functions, classes and objects have correct indentation and closer.

JS Naming convention:

camelCase, PascalCase

Commenting and Documentation:

Allows you to keep neat notes of what code does what, and allows you to have a predicted outcome if needed in one spot without having a different document.

Semicolons:

End segments of code so the program knows what code is meant where, such as terminating statements.

Braces and Blocks:

This improves code readability and reduces the likelihood of introducing bugs and some functions need them to run correctly.

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

While working on a Delphi project in High-School, I ran into the problem with a randomizer. When randomizing i had a predicted outcome but the text didn't work correctly and gave me back a different result to what i wanted, it turns out my if and for statements were swapped around which took me 7 days to figure out. Keep in mind I worked on the rest of the code with the broken program and all the other code worked properly.

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