# DWA\_01.3 Knowledge Check\_DWA1

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

So that when things go wrong, they can easily be fixed and they can be picked up very quickly. So that it is easy to debug the code..

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

* Programming is complex
* Requirements keeps changing/evolving
* Technical Debts- some things may need to be changed quickly, therefore documentation for that change will fall behind.
* Scaling-projects differs in size

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

* Code Style
* Documentation
* Modular
* Abstraction

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

Yes, if complexity is not managed, errors and mistakes will be introduced and there will be bugs in a program. Complexity that is left unmanaged can lead to inefficiencies in processes and workflows. These errors can have negative consequences, such as financial losses, damaged reputation, or compromised quality.

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

* Naming conventions-In JavaScript variables and functions are named using camel casing.
* Grouping functions and variables together.
* Indentation and Spacing-if used correctly and consistently code becomes easy to read.
* Commenting-comments play a role in code documentation.
* Using named function expressions instead of function declarations.

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

Confusing two variables. So it is important to make your variables expressive.

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