

DWA_01.3 Knowledge Check_DWA1

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

Just as a simplified rocket design enhances reliability and mission success, writing clear and manageable code simplifies software development. It allows for easier debugging, maintenance, and scalability. By managing complexity, both rocket scientists and software developers ensure that their creations can navigate the challenges ahead, whether in the vastness of space or the dynamic landscape of technology.

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

Readability
Evolving requirements

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

By writing code that is readable by others (avoiding ambiguous variable names, including extra information in variable names etc). Using upper snake case for global constants. Describing shapes and behaviour with JSDoc. Managing your technical debt.

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

Yes the programme will be extremely faulty and difficult to debug.

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

Spaces around operators

Always put spaces around operators (= + - * /), and after commas:

Let x = y + z

Always end a simple statement with a semicolon

Const cars = ["volvo", "Fiat", "Saab"];

Line Length < 80

For readability, avoid lines longer than 80 characters.

If a JavaScript statement does not fit on one line, the best place to break it, is after an operator or a comma.

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

Changing the theme on an app. I didn't fully understand what i had written as i was also still learning therefore not knowing where to begin in fixing it.
