DWA_01.3 Knowledge Check_DWA1

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

For readability so that the code that is complex can be easily read and understood by developers. Also for debugging and testing so that you can simplify the code and make it easier to fix and isolate issues.

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

Time management, when developers are under pressure to deliver quickly they take shortcuts leading to long-term consequences. Lots of rules, sometime the things we want the software to do can be very complicated, its like having many special rules for how the building blocks should fit together and following these rules can be challenging and make the software complex.

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

Comments, clear and concise comments within the code can help developers understand complex sections and also improve collaboration. Refactoring, restructuring the code without changing its external behavior to improve its internal structure and make it more manageable.

4. Are there implications of not managing complexity on a small scale?
Yes, like difficulty in understanding the code and this can result in increased bugs and reduced productivity.
5. List a couple of codified style guide rules, and explain them in detail.
 Use indentation, consistent indentation improves code readability and helps developers understand the structure and nesting of the code blocks so by ensuring to use specific style like using 2 or 4 spaces you ensure that the code is visually consistent throughout the project. Use quotation marks, consistency in quotation marks for strings improves the code readability and maintains a uniform style so by adopting a consistent approach, whether it's using single or double quotes, you avoid confusion and make the code look cohesive.
6. To date, what bug has taken you the longest to fix - why did it take so long?
To make my div move when hovering over it. It took me a long time because I did not exactly understand hovering, so once I really studied it and also collaborated with a classmate we managed to get it.