# DWA_01.3 Knowledge Check_DWA1

---

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

It is important so that it can be maintainable, scalable ,readable , understandable  and also be easy to debug it whenever there is bugs .

---

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

constantly changing requirements can lead to software complexity,Complex dependencies between software components or external libraries increase the overall complexity of the system.

---

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

Breaking down your code into smaller, reusable modules,Embracing functional programming concepts like immutability, higher-order functions, and pure functions and as well writing a clear and concise documentation for your code.

---

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

Yes, even on a small scale, not managing complexity in software development can lead to several implications like decreasing the maintainability of the code ,Increased Bug Density and also causing difficulties in reading the code .

_____

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

Using  meaningful variable and function names like choosing descriptive and meaningful names for variables, functions, classes, and other use identifiers in your code to limit the length of lines and functions for example breaking code into shorter lines and smaller functions improves code comprehension, makes it easier to follow program flow, and facilitates debugging and modification.

_____

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

I don't have a personal experience with debugging.

_____