DWA_01.3 Knowledge Check_DWA1

---

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

- When things go wrong they can be easily identified and fixed.
- Saves time debugging code.
- Makes code bases more readable and understandable.
- Our code has a long shelf life. It will be handled by others.

---

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

- The large teams working on the code base.
- Human error. Lack of 100% precision.
- Updates in software (languages).
- Increased functionality (bigger code base).

---

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

- Standardising your code. (use code style guides).
- Testing (test-driven development)
- Error handling
- Commenting and documenting the code

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

- The project could completely crash.
- Crashes in the project could lead to significant financial losses and time consumed.
- Code can get out of control and become difficult to understand and work with.

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

- File names must be all lowercase and may include underscores (_) or dashes (-), but no additional punctuation.
- Statements: one statement per line. Each specific thing that you want the code to do should go into its own line.
- Each statement should end with a semicolon. Do not rely on automatic semicolon completion from the code editor.

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

It was working with loops and filtering the arrays in the IWA 19 capstone project. I could not wrap my head around looping within a loop and also coming up with the resulting data that would then be displayed after the user has completed their search. I still haven’t fixed it.