

DWA_01.3 Knowledge Check_DWA1

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

- Complex code is more prone to bugs. Managing the complexity of a code can reduce the likelihood of bugs and makes debugging easier.
 - Readability for yourself and other developers who may want to collaborate and or view your work.
 - Creating code that is modular is important as it can save developers time and effort and some of the components from previous codes may be reusable.
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2. What are the factors that create complexity in Software?

- Programming is complex
 - Requirements are constantly evolving as a developer is constantly changing the direction per the customer/users wants
 - Technical debt
 - Scaling
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3. What are ways in which complexity can be managed in JavaScript?

- Code Styles
- Documentations e.g comments and JS Doc
- Modular code
- Abstraction

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

-keeping programming under control despite the size is vital as the code may become too difficult to maintain. As the code grows, it will become harder to understand, debug and change.

-despite the code being small,there is still the risk of bugs and errors occurring which may be hard to identify and fix.

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

1. Using long, descriptive variable names.

Descriptive names make it easier for you and other developers to understand the purpose and functionality of variables and function. Descriptive names may assist the programmer in debugging code by providing the context of the code.

2. Consistency in code formatting.

A consistent format makes the code look more uniform thus improving it's readability.

3. Use comments for clarity

Comments can be used to clarify code and to explain the purpose of the code.

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

During the Intro To Web course, in my final project, i was struggling to complete one of my resumes because the code was not functioning. I was working on the project for about three days stuck on this one issue. Only to find that the root of the problem was because i missed a letter in one of html elements.
