DWA_01.3 Knowledge Check_DWA1

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1. Why is it important to manage complexity in Software?
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    - Managing complexity can make it easy to maintain your code and to update it.
    - It also helps make your code more readable and easy to understand.
    - Developers can design software that can scale effectively and maintain performance
    - Managing complexity in a software is important, as it helps create a software that is easy to maintain,understand, evolve and improving quality

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

    - Programming is complex(some types of software are more complex than others)
    - Evolving (mostly we don't know everything up front,
      what we should be building and what the customer wants.
      And because things are changing as you are building your code,
    - Technical Debt (when you agave to make a quick fix, when the is a bug or when a user needs a certain feature urgently,
      Sometimes you just have to write a quick quote but you have to later fix it
    - Scaling (systems grow and user demands increase or changes)

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

    - Document comments type (Add comments to add more clarity to the code)
    - Shaping your code (making it more clearer of what the code is doing)
    - Modular (dividing your code into small, self-contained functions)
      (make it easy to reuse, or be able to use it somewhere else)
    - Be more clear when creating contests
    - Find common ways to style your code
    - Make your variables more descriptive
    - Build it in a way that it can not run if it has the wrong value.
    - Give guidance to what your code is about

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

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- If you don’t manage complexity it leads to issues, like errors
- It becomes hard to adapt to changing requirements, demands and new challenges.

- Complexity needs to be managed in small scales as the code needs to change as the product grows. Code is always in flux, you are never done
- You should always refactor, clean, improving the performance and making it better

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

- Use single quotes for string
- Having properties in an object beyond new lines
- Commas should have a space after them.
- Using brackets if an if statement is more than a single line
- global
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6. To date, what bug has taken you the longest to fix - why did it take so long?

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Keeping programs under control is the main problem of programming.

Avoidable “dump”errors, on most of my codes i get bugs where, i have forgot top close brackets, use commas where need…
