

# DWA\_01.3 Knowledge Check\_DWA1

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

Constant complexity management can result in a significant profitability increase of an enterprise

It'll help you increase the quality of your code so that these situations don't happen as often. To reduce software complexity, developers must write small units of code (function, procedure, methods) but also avoid statements (goto, break, continue) that make the code harder to understand and increase its complexity.

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

- clear design upfront, BEFORE you start any code; if the design requirements change later, you redesign, don't just patch around
  - separation of concerns, layers, critical class/block size; if you identify the new requirement should go to class X, but what the core job of the class differs, I create a new class; have classes for
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## 3. What are ways in which complexity can be managed in JavaScript?

### 1. Reuse What Will Be Used More Than Once

2. Readability and Maintainability Over a Generic Solution
3. Make Modules, Classes, or Components as Small as Possible
4. Code Like You're in a Team — Even a One-Person Team

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

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

#### Indentation

Use spaces, not tabs. Tabs should only appear in files that require them for semantic meaning

#### Spacing

Do not place spaces around unary operators.

#### Line breaking

Each statement should get its own line.

Names

#### Use CamelCase.

Capitalize the first letter, including all letters in an acronym, in a class, struct, protocol, or namespace name. Lower-case the first letter, including all letters in an acronym, in a variable or function name.

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

Mostly silly syntax errors that take up a lot of my time before i notice the ,especially in the IWA Capstone project

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