DWA_01.3 Knowledge Check_DWA1

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

Managing complexity in software is important for several reasons. As software systems grow in size and complexity, it becomes increasingly difficult to understand, maintain, and modify them. This can lead to increased development time, higher costs, and lower quality. By managing complexity, developers can create software that is easier to understand, maintain, and modify, which can result in faster development times, lower costs, and higher quality.

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

Size- As the size of a software system increases, so does its complexity. Larger systems have more components and interactions, making them more difficult to understand and manage.

Interdependence- When components of a software system are tightly coupled, changes to one component can have a ripple effect throughout the system, increasing its complexity.

Diversity- Software systems that support a wide range of functionality or serve a diverse user base can be more complex due to the need to accommodate different needs and requirements.

Technology-The use of new or rapidly changing technology can increase the complexity of a software system, as developers must constantly learn and adapt to new tools and techniques

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

Breaking code into smaller, more manageable modules can help reduce complexity and make it easier to understand and maintain.

Writing concise, readable code can help reduce complexity and make it easier to understand and maintain.

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

When complexity is not managed, it can lead to increased development time, higher costs, and lower quality. This is because as software systems grow in size and complexity, it becomes increasingly difficult to understand, maintain, and modify them. This can result in code that is difficult to understand and maintain, leading to increased development time and costs.

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

Consistent terminology: Using consistent terminology throughout your documents can help reduce confusion and improve clarity. For example, if your organization refers to customers as "clients," then all documents should use the term "clients" rather than using different terms such as "customers" or "users."

Formatting: Consistent formatting can help make documents easier to read and understand. This can include things like using headings and subheadings to organize content, using bullet points or numbered lists to present information, and using consistent font sizes and styles.

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

Javascript, I was creating an online store. I was struggling to write the correct code so that everything can work perfectly.