Let AI Evaluate Your Understanding of Non-Functional Requirements

Test your knowledge of non-functional requirements and their significance in system design.

We'll cover the following ∧

- Assessment 1: Cloud-based file store
- Assessment 2: Financial trading platform
- Assessment 3: Spacecraft operations
- Assessment 4: Twitter

We have now covered the non-functional attributes of a system. Take the following AI-powered assessments to solidify and test your knowledge of non-functional attributes in real-world scenarios. Don't worry; our AI mentor will guide you along the way.

Assessment 1: Cloud-based file store

ⓘ You are leading a team developing a cloud-based file-sharing platform for a multinational corporation. You're tasked with ensuring that the platform has the following attributes:

- Depending on the time and need, the platform is able to handle an increasing number of requests arriving from different parts of the world.

- The users of the platform have worldwide 24/7 access to its files.

Keeping these requirements in view, state two of the most important and relevant nonfunctional requirements from the list provided below such that their inclusion in the design will enable us to achieve the scenario mentioned above.

- Maintainability
- Scalability
- Fault tolerance
- Reliability
- Availability

💡 **Want to know the correct answer?**

State the two most important non-functional requirements for the file-sharing system ⌜⌟

H₁ H₂ H₃ | **B** *I* | ☰ ☷ | ☰ ☰ ☰ | ⟓

Use a separate line for each non-functional requirement.

Assessment 2: Financial trading platform

ⓘ Imagine a banking application for financial transactions and buying online products. This platform allows users to obtain their account status, transfer money, pay utility bills, and generate bank statements.

List the following **non-functional requirements in the correct order,** starting from the most important non-functional requirement to the least

important non-functional requirement:

- Low latency

- Consistency

- Security

Listing non-functional requirements in correct order   ⛶

H₁ H₂ H₃ | **B** *I* | ☰ ☷ | ☰ ☰ ☰ | ✕̶

Use a separate line for each non-functional requirement.

Assessment 3: Spacecraft operations

ⓘ A space agency relies on critical systems to operate spacecraft, conduct space missions, and gather valuable data for scientific research. Imagine a scenario where a spacecraft is on a mission to explore a distant planet, and it encounters a hardware malfunction or a communication disruption with the control center on Earth.

State **one of the most important and relevant non-functional requirements** from the list provided below such that its inclusion in the design would enable us to recover from the scenario mentioned above. Please also provide proper **reasoning** behind your decision:

- Reliability

- Maintainability

- Consistency

- Fault tolerance

- Availability

- Scalability

Note: You must provide reasoning along with the name of the non-functional requirement in your answer.

State the most important non-functional requirement for this system along with proper

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> educative

Type the name of the requirement here.

Assessment 4: Twitter

ⓘ Consider a scenario for Twitter's recently introduced feature allowing users to stream live video directly within their tweets. As a result, the number of users streaming live video has surged exponentially. Users are consequently experiencing delays, and the system struggles to handle the increased load.

State **one of the most important and relevant non-functional requirements** from the list provided below such that its inclusion in the design would enable us to handle the scenario mentioned above.

- Reliability

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- Maintainability
- Consistency
- Fault tolerance
- Availability
- Scalability

💡 **Want to know the correct answer?**

State the most important non-functional requirement for this system

H₁ H₂ H₃ | **B** *I* | ≡ ≡ | ≡ ≡ ≡ | ✗

Type the name of the requirement here.

← **Back**

☑ **Mark As Completed**   **Next →**

Fault Tolerance

Put Back-of-the-envelope Numbers in …

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