

2-1 Quiz: Functional, Nonfunctional, and User Interface Requirements - Results ✕

Attempt 1 of 2

Written May 18, 2025 3:34 PM - May 18, 2025 3:41 PM

Attempt Score	24 / 30 - B-
Overall Grade (Highest Attempt)	24 / 30 - B-

Question 1

3 / 3 points

All systems are built based on business logic. Business logic determines what action should be taken based on user input or third-party intervention. Business logic contains *business rules* that ensure the integrity of its logic. For example, one business rule for an ATM is to not dispense more money than the user has in their account.

What type of requirements are *business rules* for system use? Select one.

- ☐ Nonfunctional Requirements
- ☒ Functional Requirements

Question 2

3 / 3 points

Reliability is measured as the amount of time the system is running and functioning properly. This includes the system's hardware and software.

What type of requirement is *reliability*? Select one.

- ☒ Nonfunctional Requirement
- ☐ Functional Requirement

Question 3

0 / 3 points

Interoperability is defined as the system's ability to work with other types of software. For example, the software for an ATM would have to work with the software that a bank uses to maintain records of accounts.

What type of requirement is *interoperability*? Select one.

- ☒ Functional Requirement
- ☐ Nonfunctional Requirement

Question 4

3 / 3 points

An external interface is used when you connect your system to an external system. For example, when you connect a smartphone (your system) to a laptop (external system) to back up your pictures, you would use an app on your laptop (such as Photos or Google Photos) to download the pictures. This app would be an example of an *external interface*.

What type of requirements are *external interfaces*? Select one.

- ☐ Nonfunctional Requirements
- ☒ Functional Requirements

Question 5

3 / 3 points

Usability is defined as the quality of user experience using a system. If the system is easy to use, the user experience is expected to be good, thus the system usability is high.

What type of requirement is *usability*? Select one.

- ☐ Functional Requirement
- ☒ Nonfunctional Requirement

Question 6

3 / 3 points

Systems are designed with a fixed way to report things. For example, if there is a system failure, a proper “report” must be created and submitted to the proper departments. As another example, if a manager wants to report on a meeting, they need to write the minutes, sign them, and archive them. Every system has its own reporting policy and mechanism, which is determined through the *reporting requirements*.

What type of requirements are *reporting requirements*? Select one.

- ☒ Functional Requirements
- ☐ Nonfunctional Requirements

Question 7

3 / 3 points

Recoverability is defined as the ability for a system to be back up and running again after it goes down.

What type of requirement is *recoverability*? Select one.

- ☐ Functional Requirement
- ☒ Nonfunctional Requirement

Question 8

0 / 3 points

Which of the following are good principles for building an interface? Select all that apply.

- ☒ Giving the user control
- ☒ Using touchscreens
- ☒ Requiring multiple instances of identity verification
- ☒ Being consistent (in terminology, layout, and so on)

Question 9

3 / 3 points

Imagine that you are designing a system which requires a user to complete an online form. One of the principles of good interface design is to *offer informative feedback*. How would you, the designer, handle invalid input entered by the user? Select one.

- ☐ Inform the user by rejecting their input
- ☐ Inform the user by accepting their input
- ☒ Inform the user by highlighting invalid input on the form and prompting the user to make fixes
- ☐ Inform the user by accepting their input but letting them know that some of the data entered was invalid

What is an interface? Select one.

- ☒ Anything that helps users communicate with the system functionality
- ☐ The connection between the server and the client
- ☐ The UML diagrams used to describe the system
- ☐ The complete system and all components within the system

Done