

Quiz Submissions - Week 1 Weekly Quiz



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Attempt 1

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Submission View

Your quiz has been submitted successfully.

Question 1

Which one of the following best define what is an architecture in an IT solution?

- ☐ A set of software classes and objects that are developed, compiled and packaged together.
- ☐ A set of trade-offs in the decisions that determine the functionality of an software system.
- ☐ A set of drawings or diagrams or views that demonstrates what are the software and hardware components required of an IT solution.
- ☒ A set of software, hardware and network components that organised together and deployed in a specific IT environment.

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Question 2

Based on IEEE 42010 standard, the architecture rationale is best defined by

- ☐ A template that can be used to describe the design of the architecture.
- ☐ A representation of a whole system from the perspective of a related set of concerns
- ☒ The explanation, justification or reasoning about design decisions that have been made and architectural alternatives not chosen.
- ☐ A set of requirements that the architecture focuses on.

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Question 3

Based on ISO 25010, which of the following best describes the fault tolerance quality attribute ?

- ☒ Degree to which, in the event of an interruption or a failure, a product or system can recover the data directly affected and re-establish the desired state of the system.
- ☐ Degree to which a system, product or component meets needs for reliability under normal operation.
- ☐ Degree to which a system, product or component is operational and accessible when required for use.
- ☒ Degree to which a system, product or component operates as intended despite the presence of hardware or software faults.

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Question 4

According to ISO 25010, what should we do to achieve better performance quality?

- ☒ Reduce the size of the image display on the browser page
- ☐ Ensure there are redundancies to failover
- ☐ Ensure the set of functions is completed on schedule
- ☐ Ensure that data are not modified by unauthorised users

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Question 5

According to ISO 25010, which one of the following best describe confidentiality with regard to the security quality?

- ☒ Proper authorisation before modifying data
- ☒ Proper authentication before accessing data
- ☐ Protect data only at rest.
- ☐ Audit logs to ensure transactions can be re-validated

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Question 6

Which one of the following best express a good quality attribute?

- ☐ The system should achieve high performance for good user experience.
- ☐ The system must be maintainable for next 5 years.

✖ ☒ Response time should be good for the checkout page.

➡ ☐ Besides the login page, user must be authenticated for rest of the pages.

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Question 7

Which one of the following is NOT considered an architectural significant requirement?

✔ ☒ The Java application is coded based on Oracle coding conventions based on the preference of the team.

☐ All data transmissions over the network must be encrypted.

☐ There is no single point of failure when the user submit a buy order on the financial application.

☐ This financial application should conform to organisation's security policy.

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Question 8

For AWS Shared Responsibility Model, which of the following is INCORRECT in terms of patch and configuration management?

☐ For IaaS, Customer is responsible to configure his/her guest operating systems

☐ For SaaS, AWS is responsible to install the software.

☐ For PaaS, Customer is responsible to configure the AWS relational database service.

✔ ☒ For IaaS, AWS is responsible to patch the security vulnerabilities of the database software installed on EC2.

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Question 9

Based on NIST definition of Cloud Computing Service Models, which of the following best describes Platform as a Service (PaaS)?

☐ The consumer does not manage or control the underlying cloud infrastructure but has full control over operating systems, storage, and deployed applications and networking components (e.g., host firewalls).

☐ The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application

capabilities, with the possible exception of limited user specific application configuration settings.

- ✓ ☒ The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.
- ☐ The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls).

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Question 10

Based on NIST definition of Cloud Computing Deployment Models, which of the following best describes a public cloud?

- ☐ The cloud infrastructure is provisioned for exclusive use by a specific community of consumers from organizations that have shared concerns
- ✗ ☒ The cloud infrastructure is a composition of two or more distinct cloud infrastructures that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability.
- ☐ The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units).
- ➡ ☐ The cloud infrastructure is provisioned for open use by the general public.

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Attempt Score:

Overall Grade (first attempt):

Done