Quiz Submissions - Week 2 Weekly Quiz

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Attempt 1

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Submission View

Your quiz has been submitted successfully.

Question 1

In the life of a software process, which of the following state is not a valid process state?

- ( ) ready
- ✖ (●) running
- ( ) blocked
- ➡ ( ) active

Question 2

How many usable hosts are there in 192.168.1.0/24? (exclude network and broadcast addresses)

- ( ) 126
- ➡ ( ) 254
- ✖ (●) 510
- ( ) 1022

Question 3

http://www.somewhere.com/443

Which of the following statement is correct?

- ( ) hostname is www.somewhere.com and protocol is https
- ( ) protocol is https and port is 443
- ✖ (●) protocol is http and port is 443
- ➡ ( ) protocol is http and port is 80

Question 4

Which of the following is correct about a layered architectural style?

- ○ Layered architecture style describes the physical separation of software components
- ○ Open layers cannot bypass
- ○ Each layer is dependent on the layer beside it
- ✓ ⦿ Each layer is dependent on the closed layer below it

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Question 5

Which of the following is correct about distributed systems?

- ○ The server is the component that always first initiates the connection to the client.
- ○ The client usually create a socket and use a well-known port (e.g., port 80) locally to connect to the server
- ✗ ⦿ The client does not need to know the port the server is listening on.
- ⇒ ○ In the network exercise, the reverse proxy opens two different ports to listen to browser connections and to connect to the web application.

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Question 6

What one of the following is correct about a proxy server?

E.g., For a browser accessing a web app through a proxy server, the browser is the client and web app is the server.

- ○ A forward proxy hides the identity of the external servers
- ○ A reverse proxy encapsulates the internal servers from the internal clients
- ○ A forward proxy encapsulates the internal servers from the external clients.
- ✓ ⦿ A reverse proxy hides the identity of the internal servers

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Question 7

Which one of the following is correct about basic networking concepts? Choose the best answer.

- ○ For a network address of 192.168.0.0 and subnet mask 255.255.0.0, the host bits is 8 bits.
- ✓ ⦿ The DNS contains a list of readable names and the corresponding IP addresses
- ○ The DHCP protocol allows a client to learn the mapping between IP and MAC address
- ○ The DHCP protocol allows a client to learn its MAC address

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Question 8

Traffic from the insecure internet zone need to enter the DMZ first before accessing the internal zone.

What of the following statement is **INCORRECT** about the demilitarized zone (DMZ) and internal zone?

- ○ DMZ provides network segmentation to create a space for traffic to be organized between the insecure internet zone and the internal zone.
- ⇒ ○ Hosts in the DMZ can easily access any other services in the internal network.
- ✗ ⦿ DMZ is a network with an advanced security layer to restricting access to sensitive data and servers in the internal zone.
- ○ DMZ prevents attackers from performing the reconnaissance work they carry out the search for potential targets in the internal zone.

Question 9

Which of the following is **CORRECT** when we compare virtual machines (VMs) against containers? Choose the best answer.

- ○ Only one application (e.g., web app) can be running in one VM.
- ○ Containers use more computing resources than VMs
- ○ VMs is less isolated in terms of security than containers
- ✓ ⦿ VMs start slower than containers

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Question 10

Which of the following is correct about multi-tenancy design?

○ A shared-everything multi-tenant design is considered more isolated in terms of computing resources than a shared-nothing design.

○ Multi-tenancy design refers to the software design to serve multiple users of the same organization/tenents

○ A Shared-everything multi-tenant design uses separate VMs per tenant for the application layer.

✓ ◉ A shared-everything multi-tenant design uses less resources than a shared-nothing design.

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Attempt Score:

Overall Grade (first attempt):

Done