Quiz 1: Cloud Computing and Distributed Systems

Due May 25 at 11:59pm

Points 100

Questions 5

Available May 18 at 8am - May 25 at 11:59pm 8 days

Time Limit 60 Minutes

This quiz was locked May 25 at 11:59pm.

Attempt History

| | Attempt | Time | Score |
|--------|-----------|------------|---------------|
| LATEST | Attempt 1 | 20 minutes | 90 out of 100 |

Score for this quiz: **90** out of 100 Submitted May 25 at 10:54am This attempt took 20 minutes.

Question 1

20 / 20 pts

What are the seven layers in the OSI protocol stack?

Your Answer:

- 1. Application Layer
- 2. Presentation Layer
- 3. Session Layer
- 4. Transport Layer
- 5. Network Layer
- 6. Data Link Layer
- 7. Physical Layer

Question 2

10 / 20 pts

What assumption underlies the argument for doing retransmission of lost packets "end-to-end" instead of "hop-to-hop"?

Your Answer:

That the probability of loss is small enough that with many hops most of the IP packets will transfer.

The end-to-end argument assumes that the probability of message loss on any given hop is low, so the cost of providing point-to-point retransmission is not justified.

Question 3 20 / 20 pts

What are the three adoption challenges for an organization wishing to move into the cloud?

Your Answer:

- 1. Availability: Will the cloud service be readily obtained in the future
- 2. Data Lock-In: Will the data be able to be restored from the cloud service
- 3. Data Confidentiality and Auditability: is that data securely stored and able to be accessed and accounted for.

Question 4 20 / 20 pts

What are the five growth challenges for an organization wishing to move into the cloud?

Your Answer:

- 1. Data Transfer and Bottlenecks: can data be transferred quickly between servers and to clients/users
- 2. Performance Unpredictability
- 3. Scalable Storage: Will more/less storage be available and at what cost
- 4. Bugs in Large Distribution Systems

Scaling Quickly: Can the cloud sustain quick growth/shrinking on demand

Question 5 20 / 20 pts

What are the two policy and business challenges for an organization wishing to move into the cloud?

Your Answer:

- Reputation Fate Sharing: Does the service have a reputation? I think another good one to add is if the reputation is backed by other companies and organizations (for example the DoD requires the use of Microsoft Exchange for emails)
- 2. Software Licensing: Is it a pay-per-use, one-time licensing fee, or is the software free and open-source.

Quiz Score: 90 out of 100