Question 56

Not yet answered

Marked out of 1.00

Difference between cluster computing and cloud computing?

Select one:

- In cloud, computers work together but in cluster, computers work independently.
- In cloud, resources are treated independently but in cluster, the resources are treated as one system.
- In cloud, resources are virtualized but in cluster, resources are running physically on a computer system.
- In cloud, resources are not as reliable as in cluster because cluster has redundant nodes for high availability.

Question 57

Not yet answered

Marked out of 1.00

Which one of the following is the correct use case for choosing "custom objects" for data communication.

Select one:

- a. You need to support different types of callers, including third-party clients.
- b. You need loose coupling, where the caller must know about only the data that defines the business entity and the schema that provides metadata for the business entity.
- c. You are communicating with components that know about the object type.
- d. You need built-in support for serialization.

Question 58

Not yet answered

Marked out of 1.00

For which of the following situations would a stack be recommended?

Select one:

- Handling requests from multiple clients
- Keeping a collection sorted after insertions/deletions
- Handling multiple undo operations
- Efficiently computing the sum of all the elements from a collection

Question 59

Not yet answered

Marked out of 1.00

You recently defined a new data system that stores a small computation done for every file in a repository. The actual computation is miniscule, with a complexity O(log(n)) where n is the size of the file in lines of code. One of the requirements you listed in your specification was for the computation for an entire repository of 10,000 files, each file being less than 5,000 lines should be computed and saved in your database in less than 5 minutes. The dev team has come back saying that these performance requirements are unrealistic and that even the database insertions into the relational database is taking longer than the 5 minutes specified. Knowing that 10,000 inserts into a properly scaled RDS (Ex: AWS Aurora on an 8XL machine) should take nowhere near 5minutes, you start to question the developer's implementation.
What would be your first question/concern that you would want details on from your developer?

Select one:

- How is traffic routed from the application to the RDS?
- What is the DB schema you are using for this data type you're inserting?
- Are you inserting each item individually, or batching the insert request?
- What ORM are you using in your java implementation?
- Are you using a UTF8 encoding, or a UTF16 encoding for strings?

Question 60

Not yet answered

Marked out of 1.00

What of the following are considered benefits of using a Microservice architecture?

Select one or more:

- [x] Fault-tolerant design.
- [ ] Easier to trace problems
- [ ] Easier to manage as the project size increases
- [x] Easy to scale