

1

What is one advantage of using message queues in the software architecture of a system?



A

It allows to improve the latency associated with the initial request, and the complete task is effectively finished.



It makes the system more resilient to failures.

C

All the other options are false.

D

It supports synchronous communication between components.

2

What is a disadvantage of applying horizontal scaling to a database that is the master of a master-slave configuration?



A

It reduces the overall performance of the system as the storage demand increases.

B

It may not be able to scale indefinitely in terms of storage capacity.

C

It can only be applied to noSQL databases.



Joins have to be done outside the database.

3

In which measures does the availability quality depends on?



A

All options are false.

B

The mean time between failures.

C

The mean time to repair.



Both, the mean time between failures and the mean time to repair.

4

When writing the availability scenarios of a system



A

It is possible to write all scenarios without designing any part of the architecture.



The identification of which faults can occur is an iterative process that is applied at different phases of the architectural design.

C

The availability scenarios should describe what is the expected behavior of the system, from the end user point of view, without being necessary to identify the concrete faults that can occur in the components.

D

The definition of a solution for a particular fault does not bring the possibility of the occurrence of new faults.

5

Consider the following availability scenario

"If one of the application servers fails to respond to a request when the system is in its normal operation state, the system should notify the operator and continue to operate normally."

A

The scenario is not completely correct because it contains two responses.

B

The scenario is correct but it is not clear what is the artefact.



The scenario is correct but it does not describe whether the request the servers fails to respond, actually succeeds or fails.

D

The scenario is not correct.