Congratulations! You passed!
TO PASS 80% or higher

Keep Learning

GRADE
100%

NOSQL Systems

TOTAL POINTS 10

1. What is the main challenge of the traditional relational databases? **1 / 1 point**

- ○ Managing large amounts of structured data
- ◉ Managing of semi-structured and unstructured data

Correct
Well done! Yes, relational databases cannot manage semi-structured and unstructured data. In the case of huge amounts of structured data, we will see that there are options, even with relational databases.

2. NoSQL databases differ from relational databases in three main areas: data structure, data models and development model. **1 / 1 point**

- ◉ True
- ○ False

Correct
Right! A NoSQL Database management does not need to define a schema before to store data, NoSQL database can manage unstructured data, NoSQL databases are open source, a relational database does not support these three features.

3. No SQL Technology is ... **1 / 1 point**

- ◉ A new generation of databases that are relational, distributed, open source, schemaless and horizontally scalable
- ○ A new generation of databases that are non-relational, distributed, open source, schemaless and vertically scalable

Correct
Yes!, the NoSQL databases are non-relational, they do not need a predefined schema and if they experience some growth, it is possible to add nodes to a distributed system in such a way that it provides processing and storage economically

4. The Benefits of NoSQL are... **1 / 1 point**

- ◉ High performance, horizontal scaling, flexible and simple storage mechanism
- ○ Atomicity, consistency, isolation and durability

Correct
The benefits of NoSQL are that they provide a better performance than non-transactional relational databases, can add more nodes to the distributed system and they do not need a predefined structure of data because of their simple storage mechanism.

5. The disadvantages of NoSQL are that they do not have a standardized query language, they do not full support ACID properties, and in order to provide integrity extra programming must be required. **1 / 1 point**

- ◉ True
- ○ False

Correct

Yes! Remember the BASE properties and the CAP theorem.

6. The CAP Theorem means that... **1 / 1 point**

- (●) A NoSQL database can support two of consistency, availability or partition tolerance
- ( ) NoSQL supports high performance, horizontal scaling, flexible and simple storage mechanism.

✓ **Correct**
Yes actually, NoSQL databases conform to the CAP theorem, which means that they can support two of consistency, availability or partition tolerance.

7. The BASE properties of NoSQL mean that an application works and data is consistent all the time. **1 / 1 point**

- ( ) True
- (●) False

✓ **Correct**
Yes! The BASE properties of NoSQL mean that an application works basically all the time, it does not have to be consistent all the time but it will eventually reach a known state.

8. The most common NoSQL databases support video, music, documents and text, altogether **1 / 1 point**

- (●) False
- ( ) True

✓ **Correct**
Nowadays, the most common NoSQL databases support key-value, column oriented, document oriented or graph, one or two of them, but not all.

9. MongoDB is a graph database **1 / 1 point**

- (●) False
- ( ) True

✓ **Correct**
Yes! Actually, MongoDB is a document database

10. Neo4j is a columnar database **1 / 1 point**

- (●) False
- ( ) True

✓ **Correct**
Yes!, actually, Neo4j is a graph database.