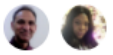
Feedback to Hendrik's Post

Hendrik Van Rooyen

Initial Post

24 days ago

2 replies



Last 9 days ago

What is a SQL relational database?
A relational database is a collection of structured information that is divided into separate relatable data points (Oracle, N.D; Techtarget, N.D).

What is a NoSQL document store?
A document store is a collection of nonrelational unstructured information in the form of complex structures like JSON (Gupta et al, 2017; Amazon, N.D).

Some Key differences between a NoSQL document store and a SQL relational database are:

- A document store does not conform to a schema whereas a relational database requires the schema to exist before adding data (Couchbase, N.D).
- Document stores offer good performance by scaling horizontally whereas a typical SQL relational database scales vertically (Couchbase, N.D).
- Relations are handled by a process of normalization in relational databases, whereas additional documents have to be created and connected by a reference in a document store (Couchbase, N.D).
- Relational databases use a structured query language whereas a document store does not conform to any standard query language (Nayak et al, 2013).
- A relational database guarantees ACID (Atomicity, Consistency, Isolation and Durability) compliance where it is not guaranteed in a document store, but instead it guarantees the BASE (Basically Available, Soft State and Eventual consistency) consistency model (Nayak et al, 2013).

Each technology comes with its trade-offs and thus deciding on which suits the project best comes to careful analysis of the project requirements.

Amazon. (N.D) What Is a Document Database. Available from: https://aws.amazon.com/nosql/document/ [Accessed 30 June 2021].
Couchbase. (N.D) Comparing Document Databases and Relational Databases. Available from: https://developer.couchbase.com/comparing-document-vs-relational/ [Accessed 30 June 2021].

Nayak, A., Poriya, A. and Poojary, D. (2013). Type of NOSQL databases and its comparison with relational databases. *International Journal of Applied Information Systems*, 5(4): 16-19.

Reply

2 replies

Post by **Kikelomo Obayemi**
Peer Response

12 days ago

Hello Hendrik,
Nice Post. I particularly like you last paragraph where you stated that:

"Each technology comes with its trade-offs and thus deciding on which suits the project best comes to careful analysis of the project requirements."

Both technologies have their benefits and drawbacks and the choice is largely dependent on use.

Reply