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Discussion 2.1

Web 335

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1. **In the context of NoSQL databases, what is consistency and why is it important?**

Consistency in a NoSQL context attempts to address the vast amounts of errors a database can encounter from user operations. According to the text, “Consistency comes in various forms, and that one word covers a myriad of ways errors can creep into your life” [ Pramod, 47]. There are many types of consistency and we must choose the right one for the project.

1. **What is update consistency and why is it important?**

The update consistency focuses on conditional updates. This is “where any client that does an update, tests the value just before updating it to see if it is changed since last read” [Krishna].

1. **What is read consistency and why is it important?**

While any update is being performed in a NoSQL system affecting multiple aggregates, it “leaves open a time when clients could perform an inconsistent read” [Krishna]. This means that between the time the client sees the app and performs an update, the current state of the app may be different.

1. **What are write-write conflicts?**

According to the text, write-write conflicts occurs when “two people updating the same data item at the same time” [Pramod, 47]. Much like as developers we use Github there is the potential of overwriting another team members changes. With this this type of conflict, an optimistic approach is when you check the data for recent updates also like a git pull command.

1. **What are read-write conflicts?**

Read-write conflicts as explained in a previous question, occurs when data Is read while an update is pending. This means that the update goes through after the data has been read.

Reference List

Krishna Shilpa. “CAP Theorem | Consistency in NoSQL Dbs.” YouTube 30 September 2021.

<https://www.youtube.com/watch?v=lMCD1mFeM14&ab_channel=ShilpaKrishna>

Sadalage, Pramod J.; Fowler, Martin. NoSQL Distilled (p. 47). Pearson Education. Kindle Edition.