Assignment-3: Data Warehouse Processing

Instructions:

1. *This is an individual homework. Each student must submit his/her solution to the problem through Assignment-1 dropbox.*
2. All submissions are to be via the Quercus Submission System; no other way ofsubmission is accepted.
3. All submissions must be submitted through the dropbox by the due date.

Purpose and Objective

The purpose of this assignment is to expose you to data warehousing concepts.

Success Criteria

Successful identification of requirements, drafting a database schema, and successful delivery of the cloud computing lab component.

Keywords

MEAS, GFS, update, query, key, value, latency, resources, naïve, search.

Readings

https://static.googleusercontent.com/media/research.google.com/en//pubs/archive/42851.pdf

Q1. In the context of data warehousing, describe briefly what Mesa would be; idis it needed.entify why
Q2. Identify the technicl requirements that must be deployed in a data warehouse core.
Q3. Identify the operational infrastructure components that Mesa utilizes.
Q4. Identify the ACID properties in the context of data processing.
Q5. Explain how Mesa maintains data.
Q6. Identify how updates are applied.
Q7. What is the rôle of Deltas in Meas.
Q8. Refer to figure 7 and explain the update time performance :

- How often does Mesa receive batches from the sources, has Mesa been capable of consuming the data without neither running out of resources nor occurrence of update backlog; if so, how would Mesa guarantees its commit latency.

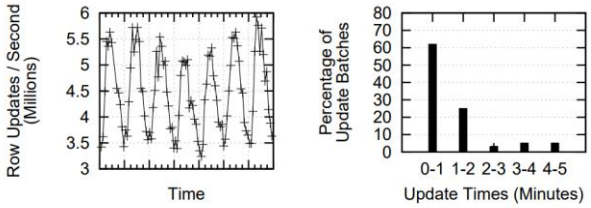

Figure 7: Update performance for a single data source over a seven day period