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Exam Professional Data Engineer All Questions
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📄 **EXAM PROFESSIONAL DATA ENGINEER TOPIC 1 QUESTION 252 DISCUSSION**

Actual exam question from Google's Professional Data Engineer

Question #: 252

Topic #: 1

[All Professional Data Engineer Questions]

You are designing a data warehouse in BigQuery to analyze sales data for a telecommunication service provider. You need to create a data model for customers, products, and subscriptions. All customers, products, and subscriptions can be updated monthly, but you must maintain a historical record of all data. You plan to use the visualization layer for current and historical reporting. You need to ensure that the data model is simple, easy-to-use, and cost-effective. What should you do?

A. Create a normalized model with tables for each entity. Use snapshots before updates to track historical data.

B. Create a normalized model with tables for each entity. Keep all input files in a Cloud Storage bucket to track historical data.

C. Create a denormalized model with nested and repeated fields. Update the table and use snapshots to track historical data.

D. Create a denormalized, append-only model with nested and repeated fields. Use the ingestion timestamp to track historical data.
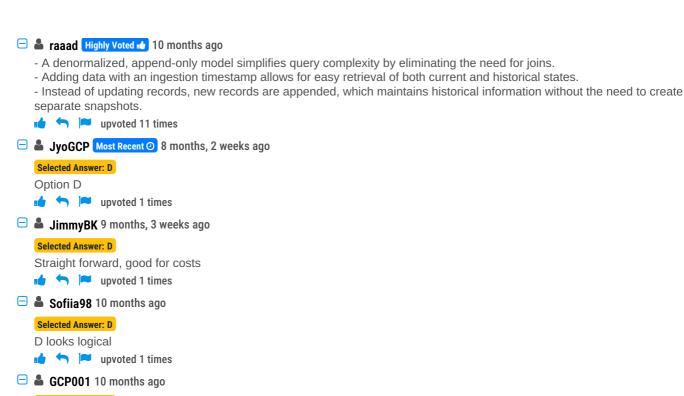
Show Suggested Answer

by 👤 **scaenruy** at *Jan. 3, 2024, 4:20 p.m.*

Comments

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☐ 👤 **raaad** `Highly Voted 👍` 10 months ago

- A denormalized, append-only model simplifies query complexity by eliminating the need for joins.
- Adding data with an ingestion timestamp allows for easy retrieval of both current and historical states.
- Instead of updating records, new records are appended, which maintains historical information without the need to create separate snapshots.

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☐ 👤 **JyoGCP** `Most Recent ⊘` 8 months, 2 weeks ago

`Selected Answer: D`

Option D

👍 ↩ 🏳 upvoted 1 times

☐ 👤 **JimmyBK** 9 months, 3 weeks ago

`Selected Answer: D`

Straight forward, good for costs

👍 ↩ 🏳 upvoted 1 times

☐ 👤 **Sofiia98** 10 months ago

`Selected Answer: D`

D looks logical

👍 ↩ 🏳 upvoted 1 times

☐ 👤 **GCP001** 10 months ago

`Selected Answer: D`

Easy, cost effective and no cpmpexity

👍 ↩ 🏳 upvoted 1 times

☐ 👤 **scaenruy** 10 months ago

`Selected Answer: D`

D. Create a denormalized, append-only model with nested and repeated fields. Use the ingestion timestamp to track historical data.

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