EXAMTOPICS

- Expert Verified, Online, **Free.**

☰ MENU 🔍

⬅ **Google Discussions**

Exam Professional Machine Learning Engineer All Questions
View all questions & answers for the Professional Machine Learning Engineer exam

Go to Exam

📄 **EXAM PROFESSIONAL MACHINE LEARNING ENGINEER TOPIC 1 QUESTION 41 DISCUSSIO..**

Actual exam question from Google's Professional Machine Learning Engineer

Question #: 41

Topic #: 1

[All Professional Machine Learning Engineer Questions]

Your team is building an application for a global bank that will be used by millions of customers. You built a forecasting model that predicts customers' account balances 3 days in the future. Your team will use the results in a new feature that will notify users when their account balance is likely to drop below $25. How should you serve your predictions?

A. 1. Create a Pub/Sub topic for each user. 2. Deploy a Cloud Function that sends a notification when your model predicts that a user's account balance will drop below the $25 threshold.

B. 1. Create a Pub/Sub topic for each user. 2. Deploy an application on the App Engine standard environment that sends a notification when your model predicts that a user's account balance will drop below the $25 threshold.

C. 1. Build a notification system on Firebase. 2. Register each user with a user ID on the Firebase Cloud Messaging server, which sends a notification when the average of all account balance predictions drops below the $25 threshold.

D. 1. Build a notification system on Firebase. 2. Register each user with a user ID on the Firebase Cloud Messaging server, which sends a notification when your model predicts that a user's account balance will drop below the $25 threshold.

Show Suggested Answer

---

by 👤 salsabilsf at *June 9, 2021, 12:23 p.m.*

Comments

Type your comment...

salsabilsf `Highly Voted 👍` 3 years, 5 months ago

Should be D !
creating a Pub/Sub topic for each user is overkill

👍 ↩ ⚑ upvoted 19 times

Y2Data 3 years, 1 month ago

Yes, create a topic is overkill but not a NOTIFICATION SYSTEM. it's totally normal.
Seriously, the step two involves "REGISTER EACH USER ....", how is this better than create a topic????

should be A and it's so obvious!

👍 ↩ ⚑ upvoted 3 times

---

q4exam 3 years, 1 month ago

I think A is straight forward answer but in real life, customer also consider cost, so practically, app engine will be picked in this case..... because of the large user base

👍 ↩ ⚑ upvoted 3 times

SlipperySlope `Highly Voted 👍` 2 years, 8 months ago

Selected Answer: D

D is correct. Firebase is designed for exactly this sort of scenario. Also, it would not be possible to create millions of pubsub topics due to GCP quotas
https://cloud.google.com/pubsub/quotas#quotas
https://firebase.google.com/docs/cloud-messaging

👍 ↩ ⚑ upvoted 9 times

PhilipKoku `Most Recent ⊘` 5 months ago

Selected Answer: D

D) Firebase

👍 ↩ ⚑ upvoted 1 times

---

fragkris 11 months ago

Selected Answer: D

D is correct. Firebase is used for applications.

👍 ↩ ⚑ upvoted 1 times

---

harithacML 1 year, 3 months ago

Selected Answer: A

simple answer , use tools most mentioned during training . , cloud functions

👍 ↩ ⚑ upvoted 1 times

Kowalski 1 year, 2 months ago

Pub/Sub has a limit of 10,000 topics only and can't be increased https://cloud.google.com/pubsub/quotas#resource_limits.

👍 ↩ ⚑ upvoted 3 times

M25 1 year, 6 months ago

Selected Answer: D

Went with D

👍 ↩ ⚑ upvoted 1 times

SergioRubiano 1 year, 7 months ago

Selected Answer: D

"Create a Pub/Sub topic for each user" xD

👍 ↩ ⚑ upvoted 2 times

Mohamed_Mossad 2 years, 4 months ago

Selected Answer: D

"Create a Pub/Sub topic for each user" this is crazy , we can not imagine a system with millions of pub/sub topics , so A,B wrong
C also wrong

👍 ↩ ⚑ upvoted 3 times

---

mmona19 2 years, 6 months ago

Selected Answer: D

D- is more automated compared to A. A is overkill

👍 ↩ 🚩 upvoted 1 times

⊟ 👤 **Vidyasagar** 2 years, 9 months ago

Selected Answer: D

I think, D is the best answer

👍 ↩ 🚩 upvoted 3 times

⊟ 👤 **fdmenendez** 2 years, 9 months ago

Project limit is 10,000 topics, you could have multiple projects but that does not scale well. so D.
https://cloud.google.com/pubsub/quotas#resource_limits

👍 ↩ 🚩 upvoted 4 times

⊟ 👤 **NamitSehgal** 2 years, 10 months ago

D looks more relevant
Notification messages: Simply display a message content, which is handled by the FCM SDK. Data Messages: Display a message with some set interactions

👍 ↩ 🚩 upvoted 3 times

⊟ 👤 **Danny2021** 2 years, 12 months ago

A doesn't work. There is a quota limit on the number of pub/sub topics you can create, also one Cloud function cannot subscribe to millions of topics. A doesn't scale at all.

👍 ↩ 🚩 upvoted 3 times

⊟ 👤 **Danny2021** 2 years, 12 months ago

Answer is D. FCM is designed for this type of notification sent to mobile and desktop apps.

👍 ↩ 🚩 upvoted 4 times

Using our own resources, we strive to strengthen the IT professionals community for free.