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Exam Professional Machine Learning Engineer All Questions

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📄 **EXAM PROFESSIONAL MACHINE LEARNING ENGINEER TOPIC 1 QUESTION 9 DISCUSSION**

Actual exam question from Google's Professional Machine Learning Engineer

Question #: 9

Topic #: 1

[All Professional Machine Learning Engineer Questions]

You are developing ML models with AI Platform for image segmentation on CT scans. You frequently update your model architectures based on the newest available research papers, and have to rerun training on the same dataset to benchmark their performance. You want to minimize computation costs and manual intervention while having version control for your code. What should you do?

A. Use Cloud Functions to identify changes to your code in Cloud Storage and trigger a retraining job.

B. Use the gcloud command-line tool to submit training jobs on AI Platform when you update your code.

C. Use Cloud Build linked with Cloud Source Repositories to trigger retraining when new code is pushed to the repository.

D. Create an automated workflow in Cloud Composer that runs daily and looks for changes in code in Cloud Storage using a sensor.

Show Suggested Answer

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by 👤 **chohan** at *June 18, 2021, 7:28 p.m.*

Comments

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celia20200410 `Highly Voted` 3 years, 3 months ago

ANS:C

CI/CD for Kubeflow pipelines.

At the heart of this architecture is Cloud Build, infrastructure. Cloud Build can import source from Cloud Source Repositories, GitHub, or Bitbucket, and then execute a build to your specifications, and produce artifacts such as Docker containers or Python tar files.

upvoted 26 times

> **q4exam** 3 years, 1 month ago
>
> I think B might be make sense if they have compute concern, there might be many version change but not all that you want to trigger compute
>
> upvoted 3 times

chohan `Highly Voted` 3 years, 4 months ago

Should be C
https://cloud.google.com/architecture/architecture-for-mlops-using-tfx-kubeflow-pipelines-and-cloud-build#cicd_architecture

upvoted 10 times

harithacML `Most Recent` 3 weeks, 6 days ago

Selected Answer: C

Req :frequently rerun training + minimise computation costs + 0 manual intervention + version control for your code
A. Use Cloud Functions to identify changes to your code in Cloud Storage and trigger a retraining job. : No version control
B. Use the gcloud command-line tool to submit training jobs on AI Platform when you update your code. : Needs manual intervention to gcloud cli code submission
C. Use Cloud Build linked with Cloud Source Repositories to trigger retraining when new code is pushed to the repository. Yes, connects to github like Vcontrols, automated=0 manual intervention + can initiate upon code changes + cost(not sure compared to other options)
D. Create an automated workflow in Cloud Composer that runs daily and looks for changes in code in Cloud Storage using a sensor. : Sensor?? too much . also none of req meets.

upvoted 1 times

PhilipKoku 4 months, 2 weeks ago

Selected Answer: C

C) It is the only answer with version control.

upvoted 1 times

HaiMinhNguyen 9 months, 1 week ago

I mean C is indeed the most logical, but i do not see anything relevant to cost concern. Anyone has any explanation?

upvoted 1 times

M25 1 year, 5 months ago

Selected Answer: C

Went with C

upvoted 1 times

fredcaram 1 year, 6 months ago

Selected Answer: C

C follows a best practice, B is a manual step

upvoted 1 times

EFIGO 1 year, 11 months ago

Selected Answer: C

C is the correct answer, it's the Google recommended approach;
Checking for changes in code without using Cloud Source Repository is a bad choice, so no A and B;
Cloud Composer is an overkill, so no D.

upvoted 1 times

abhi0706 1 year, 11 months ago

Answer is C

upvoted 1 times

GCP72 2 years, 2 months ago

Selected Answer: C

Correct answer is "C"

upvoted 2 times

👤 **Mohamed_Mossad** 2 years, 4 months ago

C is the best answer because "having version control for your code"

👍 ↩ 🚩 upvoted 1 times

👤 **caohieu04** 2 years, 7 months ago

Selected Answer: C

Community vote

👍 ↩ 🚩 upvoted 3 times

👤 **NamitSehgal** 2 years, 9 months ago

C cloudbuild

👍 ↩ 🚩 upvoted 1 times

👤 **ashii007** 2 years, 10 months ago

B is definitely wrong because it will require manual intervention.Question specifically states the objective of minimal manual intervention. C is the way to go.

👍 ↩ 🚩 upvoted 1 times

👤 **alphard** 2 years, 10 months ago

My answer is C.

Ci/CD/CT is executed in Cloud Build.

👍 ↩ 🚩 upvoted 1 times

👤 **mousseUwU** 3 years ago

C is correct

👍 ↩ 🚩 upvoted 1 times

👤 **gcper** 3 years, 1 month ago

C

Cloud Build + Source Repository triggers for CI/CD

👍 ↩ 🚩 upvoted 2 times

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