

End Lab00:59:13

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more](#)

Open Google Console

Username
student-03-28c8810b2d5f

Password
YKxvf8F5TLsP

GCP Project ID
qwiklabs-gcp-01-ba27e03498f3

Time remaining

The temporary credentials that you must use for this lab

Other information, if needed, to step through this lab

2. Click **Open Google Console**. The lab spins up resources, and then opens another tab that shows the **Sign in** page.

Tip: Arrange the tabs in separate windows, side-by-side.

Note: If you see the **Choose an account** dialog, click **Use Another Account**.

3. If necessary, copy the **Username** from the **Lab Details** panel and paste it into the **Sign in** dialog. Click **Next**.

4. Copy the **Password** from the **Lab Details** panel and paste it into the **Welcome** dialog. Click **Next**.

Important: You must use the credentials from the left panel. Do not use your Google Cloud Skills Boost credentials.

Note: Using your own Google Cloud account for this lab may incur extra charges.

5. Click through the subsequent pages:

Accept the terms and conditions.

Do not add recovery options or two-factor authentication (because this is a temporary account).

Do not sign up for free trials.

GS2230/100

Overview

Setup and requirements

Task 1. Set up AutoML

Task 2. Upload training images to Cloud Storage

Task 3. Create a dataset

Task 4. Inspect images

Task 5. Train your model

Task 6. Generate predictions

Pop Quiz

Congratulations!

Google Cloud

qwiklabs-gcp-01-ba27e03498f3

Active cloud shell

Products & solutions

All products

Jump Start Solutions

Solution deployments

Categories

Management

Compute

Storage

Analytics

Networking

Distributed Cloud

Serverless

Databases

Operations

Security

Integration Services

Enable applications and microservices to work together seamlessly

Tools

Discover productivity resources for your cloud

Name	Description
Cloud Scheduler	Managed cron job service
Cloud Tasks	Asynchronous task execution
Workflows	HTTP services orchestration
Eventarc	Modern event delivery
Application Integration	Enterprise application integrations
Integration Connectors	Enterprise Application Connectivity
Apigee	API Management

Name	Description
Identity Platform	Google-grade identity and access management

CLOUD SHELLTerminal (qwiklabs-gcp-01-ba27e03498f3) x +

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to qwiklabs-gcp-01-ba27e03498f3.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
student_03_28c8810b2d5f@cloudshell:~ (qwiklabs-gcp-01-ba27e03498f3) \$

Open Editor

End Lab

00:46:38

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more](#)

Open Google Console

Username
student-03-28c8810b2d5f

Password
YKxvf8FTLsP

GCP Project ID
qwiklabs-gcp-01-ba27e8c

Task 1. Set up AutoML

AutoML provides an interface for all the steps in training an image classification model and generating predictions on it. Start by enabling the Cloud AutoML API.

- From the **Navigation menu**, select **APIs & Services > Library**.
- In the search bar type in "Cloud AutoML".
- Observe the **Cloud AutoML API** is in the **Enable** state.
- In a new browser, open the [AutoML UI](#).

Create storage bucket

- Now create a storage bucket by running the following:

```
gsutil mb -p $GOGLE_CLOUD_PROJECT \
-c standard \
-l us-central1 \
gs://$GOGLE_CLOUD_PROJECT-vcu/
```

- In the Google Cloud console, open the **Navigation menu** and click on **Cloud Storage** to see it.

Click **Check my progress** to verify the objective.

Create a Cloud Storage Bucket

GSP223

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Overview

Setup and requirements

Task 1. Set up AutoML

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Pop Quiz

Congratulations!

Google Cloud

qwiklabs-gcp-01-ba27e03498f3

API Library

Cloud AutoML

Filter

Type to filter

2 results

Cloud AutoML API

Google Enterprise API

Train high-quality custom machine learning models with minimum effort and machine learning expertise.

Cloud Document AI API

Google Enterprise API

Service to parse structured information from unstructured or semi-structured documents using state-of-the-art Google AI such as natural language, computer vision, translation, and AutoML.

CLOUD SHELL

Terminal

qwiklabs-gcp-01-ba27e03498f3

Open Editor

Credentialed Accounts

ACTIVE: *

ACCOUNT: student-03-28c8810b2d5f@qwiklabs.net

To set the active account, run:

\$ gcloud config set account 'ACCOUNT'

student_03_28c8810b2d5f@cloudshell:~ (qwiklabs-gcp-01-ba27e03498f3) \$ gcloud config list project

[core]

project = qwiklabs-gcp-01-ba27e03498f3

Your active configuration is: [cloudshell-27356]

student_03_28c8810b2d5f@cloudshell:~ (qwiklabs-gcp-01-ba27e03498f3) \$

Windows taskbar

Google Cloud console showing the "Create a bucket" wizard. The bucket name is "qwklabs-gcp-01-ba27e03498f3". The wizard includes sections for "Name your bucket", "Location pricing", and "Good to know". The "Name your bucket" section shows the bucket name and a "CONTINUE" button. The "Location pricing" section shows the current configuration: Multi-region / Standard, with a cost of \$0.026 per GB-month and \$0.029 per GB written. The "Good to know" section provides additional information about location pricing and current configuration.

Name your bucket

Pick a globally unique, permanent name. [Naming guidelines](#)

Ex: 'example', 'example_bucket-1', or 'example.com'

Labels (OPTIONAL)

CONTINUE

Good to know

Location pricing

Storage rates vary depending on the storage class of your data and location of your bucket. [Pricing details](#)

Current configuration: Multi-region / Standard

Item	Cost
us (multiple regions in United States)	\$0.026 per GB-month
With default replication	\$0.029 per GB written

CLOUD SHELL

Terminal

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to qwklabs-gcp-01-ba27e03498f3.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
student_03_28c810b2d5b@cloudshell:~$ gcloud config set project qwklabs-gcp-01-ba27e03498f3
student_03_28c810b2d5b@cloudshell:~$ gcloud auth list
Credentialed Accounts

ACTIVE: *
ACCOUNT: student-03-28c810b2d5b@qwklabs.net

To set the active account, run:
$ gcloud config set account 'ACCOUNT'

student_03_28c810b2d5b@cloudshell:~$ (qwklabs-gcp-01-ba27e03498f3) $ gcloud config list project
[core]
project = qwklabs-gcp-01-ba27e03498f3

Your active configuration is: [cloudshell-7735c]
student_03_28c810b2d5b@cloudshell:~$ (qwklabs-gcp-01-ba27e03498f3) $ gsutil mb -p $GOOGLE_CLOUD_PROJECT \
-c Standard \
gs://$GOOGLE_CLOUD_PROJECT-vcm/
Creating gs://qwklabs-gcp-01-ba27e03498f3-vcm/...
student_03_28c810b2d5b@cloudshell:~$ (qwklabs-gcp-01-ba27e03498f3) $ export BUCKET=$GOOGLE_CLOUD_PROJECT-vcm
student_03_28c810b2d5b@cloudshell:~$ (qwklabs-gcp-01-ba27e03498f3) $
```

Google Cloud console showing the "Bucket details" page for the bucket "qwklabs-gcp-01-ba27e03498f3-vcm". The page displays the bucket's location (us-central1 (Iowa)), storage class (Standard), public access (Subject to object ACLs), and protection (None). Below the details, there is a table of objects in the bucket, including folders like "cumulus" and "cumulonimbus".

Bucket details

qwklabs-gcp-01-ba27e03498f3-vcm

Location	Storage class	Public access	Protection
us-central1 (Iowa)	Standard	Subject to object ACLs	None

OBJECTS | CONFIGURATION | PERMISSIONS | PROTECTION | LIFECYCLE | OBSERVABILITY | INVENTORY REPORTS

Buckets > qwklabs-gcp-01-ba27e03498f3-vcm

UPLOAD FILES | UPLOAD FOLDER | CREATE FOLDER | TRANSFER DATA | MANAGE HOLDS | DOWNLOAD | DELETE

Filter by name prefix only | Filter objects and folders | Show deleted data

Name	Size	Type	Created	Storage class	Last modified	Public access	Version history	Encryption	Retention expiration date	Holds
cumulus/	—	Folder	—	—	—	—	—	—	—	—
cumulonimbus/	—	Folder	—	—	—	—	—	—	—	—
cumulus/	—	Folder	—	—	—	—	—	—	—	—

CLOUD SHELL

Terminal

```
Copying gs://ipls/gsp223/images/cumulus/16.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/17.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/18.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/19.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/2.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/20.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/3.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/4.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/5.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/6.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/7.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/8.jpg [Content-Type=image/jpeg]...
Copying gs://ipls/gsp223/images/cumulus/9.jpg [Content-Type=image/jpeg]...
student_03_28c810b2d5b@cloudshell:~$ (qwklabs-gcp-01-ba27e03498f3) $
```

Cloud Storage

Buckets

Monitoring

Settings

Marketplace

Release Notes

Bucket details

qwiklabs-gcp-01-ba27e03498f3-vc

Location

us-central1 (Iowa)

Storage class

Standard

Public access

Subject to object ACLs

Protection

None

OBJECTS

CONFIGURATION

PERMISSIONS

PROTECTION

LIFECYCLE

OBSERVABILITY

INVENTORY REPORTS

Buckets

qwiklabs-gcp-01-ba27e03498f3-vc

UPLOAD FILES

UPLOAD FOLDER

CREATE FOLDER

TRANSFER DATA

MANAGE HOLDS

DOWNLOAD

DELETE

Filter by name prefix only

Filter

Filter objects and folders

Show deleted data

	Name	Size	Type	Created	Storage class	Last modified	Public access	Version history	Encryption	Retention expiration date	Holds	
<input type="checkbox"/>	cinus/	—	Folder	—	—	—	—	—	—	—	—	
<input type="checkbox"/>	cumulonimbus/	—	Folder	—	—	—	—	—	—	—	—	
<input type="checkbox"/>	cumulus/	—	Folder	—	—	—	—	—	—	—	—	
<input type="checkbox"/>	data.csv	3.7 KB	text/csv	Jul 18, 2023, 11:52:53 AM	Standard	Jul 18, 2023, 11:52:53 AM	Not public	—	Google-managed	—	None	

CLOUD SHELL

Terminal

qwiklabs-gcp-01-ba27e03498f3

Open Editor

```
Copying gs://spls/gsp223/images/cumulus/6.jpg [Content-Type=image/jpeg]...
Copying gs://spls/gsp223/images/cumulus/7.jpg [Content-Type=image/jpeg]...
Copying gs://spls/gsp223/images/cumulus/8.jpg [Content-Type=image/jpeg]...
Copying gs://spls/gsp223/images/cumulus/9.jpg [Content-Type=image/jpeg]...
student_03_28c8810b3db8@cloudshell: (qwiklabs-gcp-01-ba27e03498f3) $ gsutil cp gs://spls/gsp223/data.csv .
Copying gs://spls/gsp223/data.csv...
- (1 file(s)) 2.9 KiB/ 2.9 KiB
Operation completed over 1 object(s)/2.9 KiB.
student_03_28c8810b3db8@cloudshell: (qwiklabs-gcp-01-ba27e03498f3) $ sed -i -e 's/placeholder/${BUCKET}/${g} ./data.csv
student_03_28c8810b3db8@cloudshell: (qwiklabs-gcp-01-ba27e03498f3) $ gsutil cp ./data.csv gs://s1800327/
Copying file:///data.csv [Content-Type=text/csv]...
- (1 file(s)) 3.7 KiB/ 3.7 KiB
Operation completed over 1 object(s)/3.7 KiB.
student_03_28c8810b3db8@cloudshell: (qwiklabs-gcp-01-ba27e03498f3) $
```

Type here to search

27°C Mostly cloudy

11:53 AM 7/16/2023