



google cloud platform

How to deploy a Cloud SQL
sample app

creator info

...

linkedin



[linkedin.com/in/rahaf-
alayuni-5633901a9](https://linkedin.com/in/rahaf-alayuni-5633901a9)

...

github



[github link](#)



The screenshot shows the Google Cloud Platform navigation bar. The 'Security' menu item is highlighted with a gray background. To the right of the main menu items, there is a vertical list of security-related services. The list includes:

- Risk Manager
- Binary Authorization
- Advisory Notifications
- Access Approval
- Managed Microsoft AD

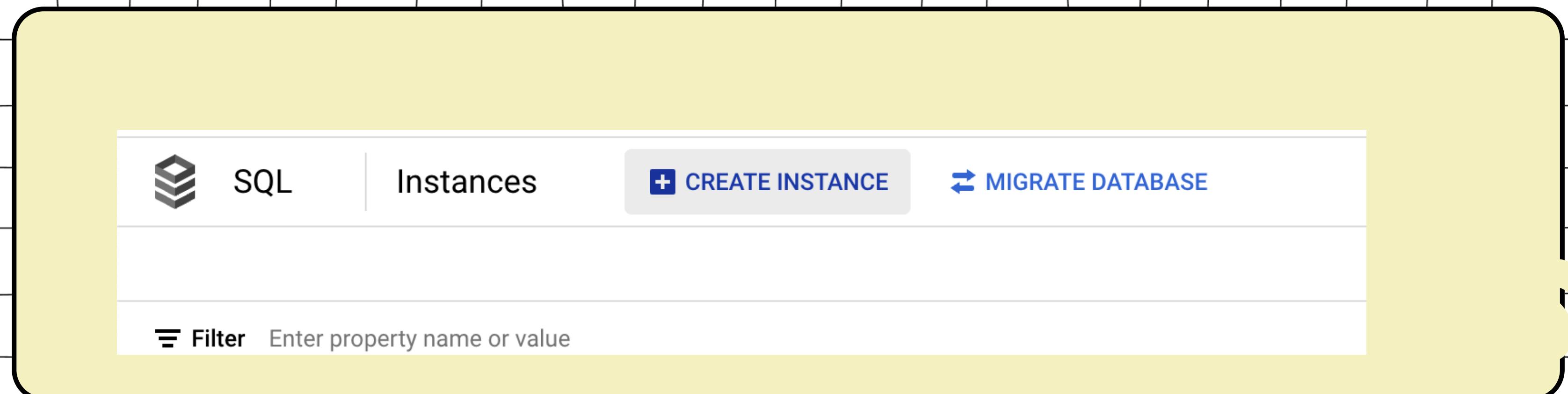
- DATA PROTECTION
- Sensitive Data Protection
- Data Loss Prevention
- Certificate Authority Service
- Key Management
- Certificate Manager
- Secret Manager

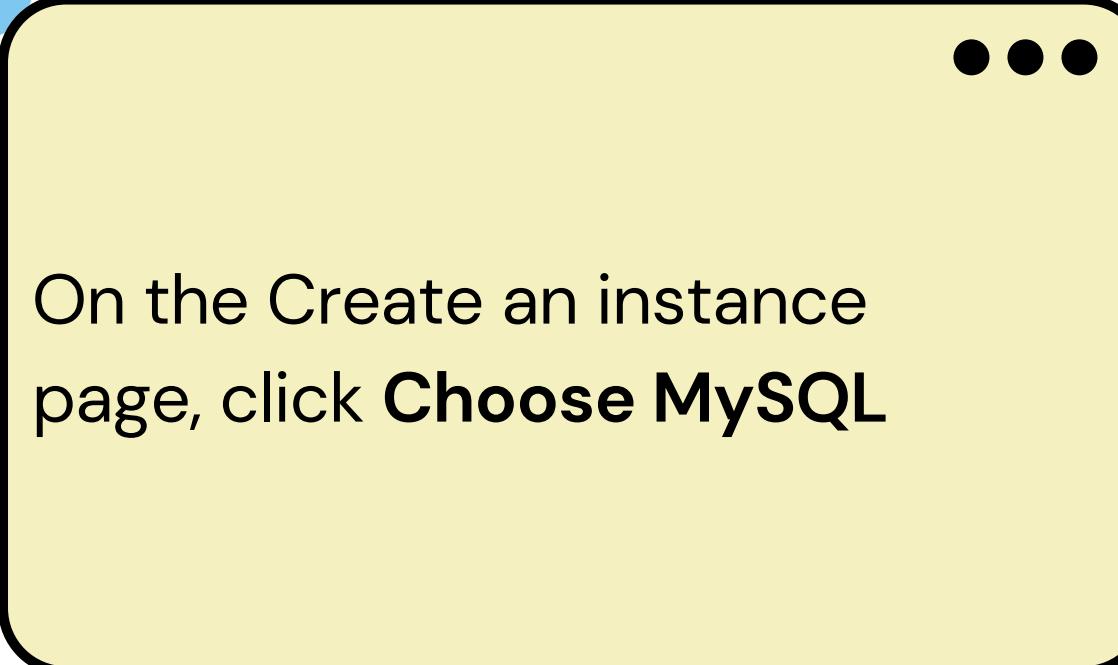
- ZERO TRUST
- Chrome Enterprise Premium
- Policy Troubleshooter for Chrome Enterprise Premium
- Identity-Aware Proxy
- VPC Service Controls

S

3

create a new instance





Choose your database engine

 MySQL

Versions: 8.0, 5.7, 5.6

[Choose MySQL](#)

1. In the Region list, ●●● select **us-central1**.
2. In the Choose region and zonal availability section, select **Single zone**.

Choose region and zonal availability

For better performance, keep your data close to the services that need it. Region is permanent, while zone can be changed any time.

Region

us-central1 (Iowa)



Zonal availability

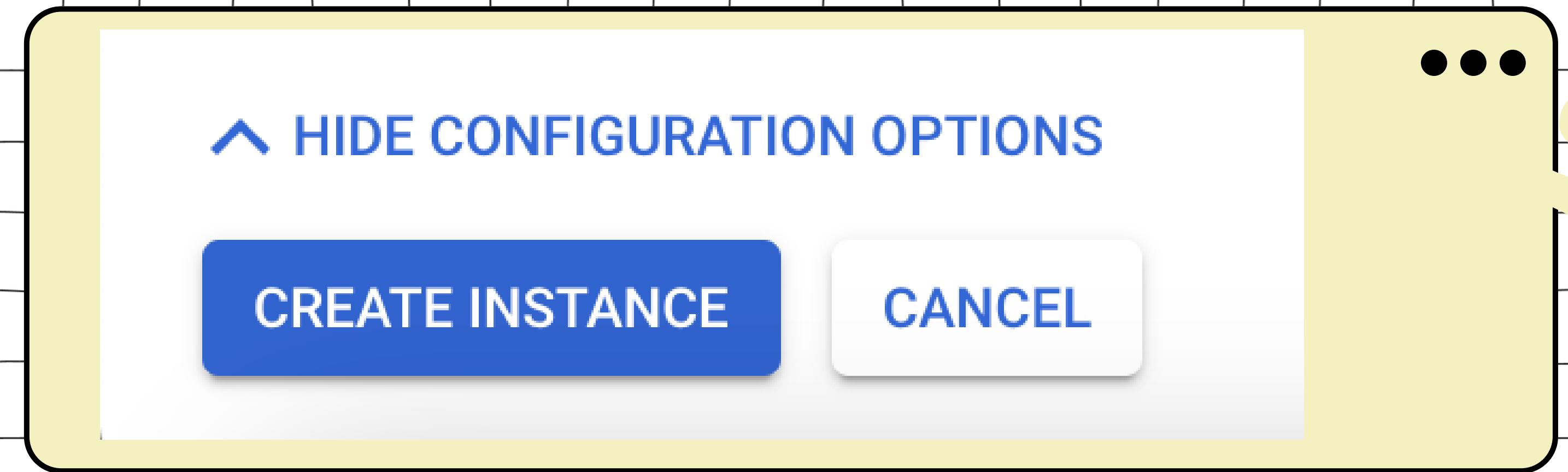
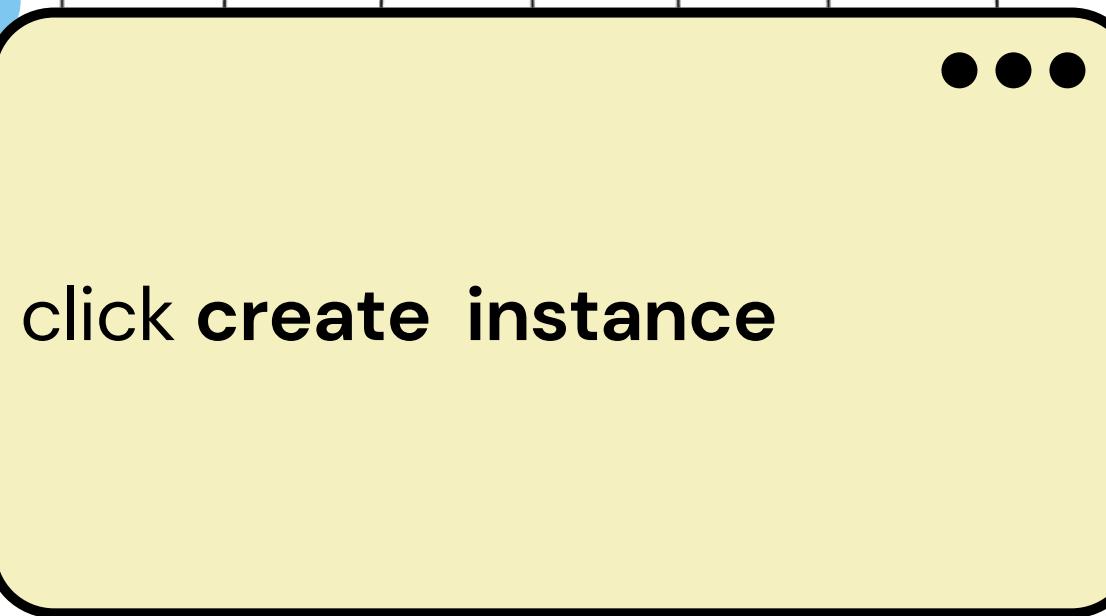
Single zone

In case of outage, no failover. Not recommended for production.

Multiple zones (Highly available)

Automatic failover to another zone within your selected region. Recommended for production instances. Increases cost.

 [SPECIFY ZONES](#)



in SQL menu click **Database**



SQL



PRIMARY INSTANCE

- Overview
- Cloud SQL Studio
- System insights
- Query insights
- Connections
- Users
- Databases
- Backups
- Replicas
- Operations

chose **create database**



CREATE DATABASE

cretae the database

Create a database

Database Name *

db1

Must follow the MySQL identifier rules. [Learn more](#)

Character set *

utf8

Can be changed later by executing an ALTER DATABASE query.

Collation

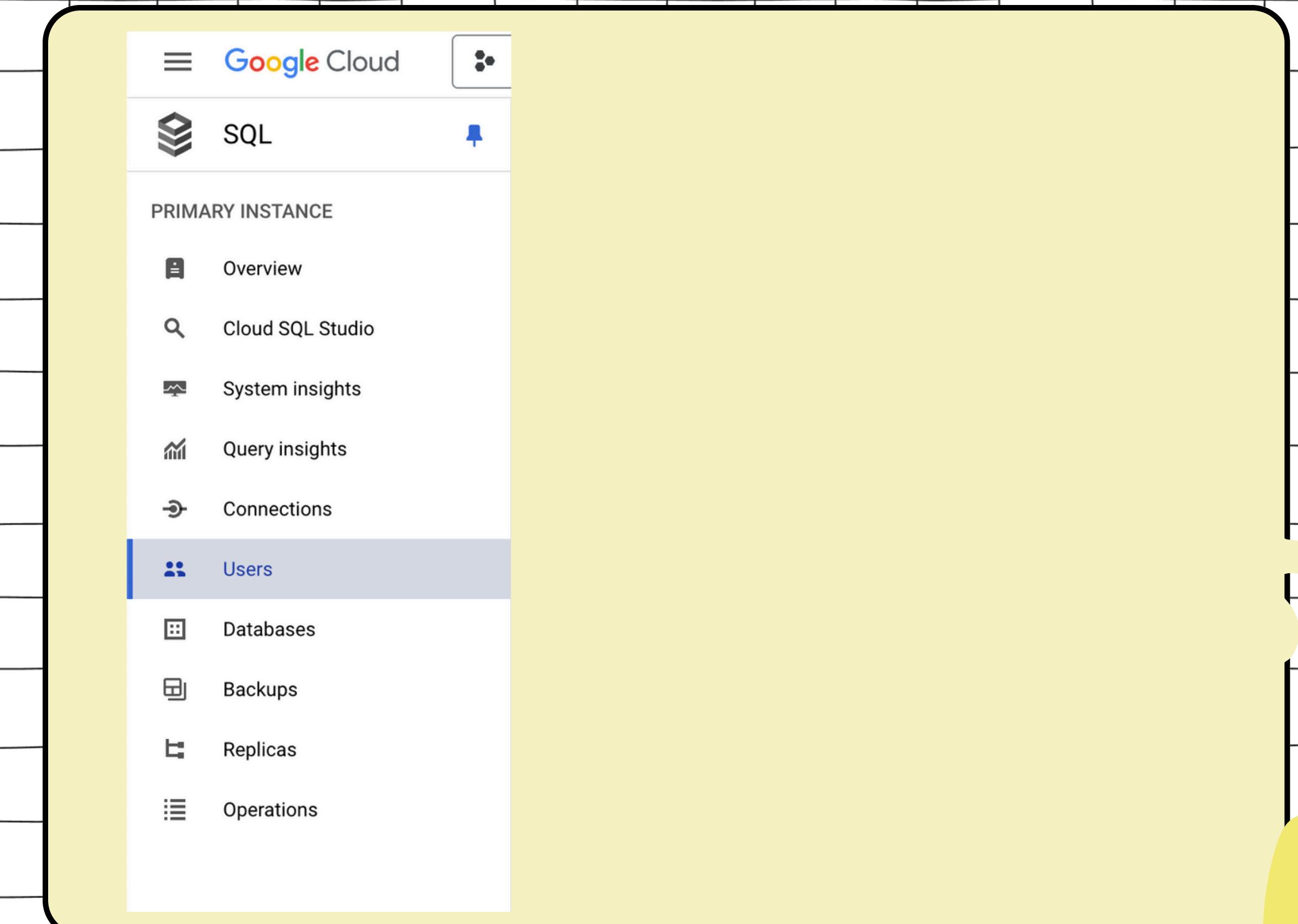
Default collation

Can be changed later by executing an ALTER DATABASE query.

CREATE

CANCEL

in the SQL menu chose
Users



Click Add user account.

MySQL 8.0

User accounts enable users and applications to connect to your instance. [Learn more ↗](#)

+ ADD USER ACCOUNT

	User name ↑	Host name	Authentication	Password
●	root	% (any host)	Built-in	N/A

- 1. In the User name field, enter **username**
- 2. In the Password field, enter **password**.
- 3. Click **Add**.

Choose how to authenticate
You can manage access to this instance using Cloud IAM or MySQL built-in authentication. [Learn more](#)

Built-in authentication
Creates a new username and password specific to this instance. User account will have cloudsqldbroot root access, but you can customize that later as needed. [Learn more](#)

User name *

Password (Optional) [GENERATE](#)

PASSWORD POLICY

Host name [?](#)
 Allow any host (%)
 Restrict host by IP address or address range

Users created with built-in authentication have the same privileges as the root user. [Learn more](#)

Cloud IAM
Associates an existing IAM principal with this user account. Must have a role providing instance-level access assigned to connect.

ADD **CANCEL**

1. In the Google Cloud console, go to **IAM**

The screenshot shows the Google Cloud IAM & Admin interface. At the top, there is a navigation bar with the Google Cloud logo and the project name "My Project 16334". Below the navigation bar, there are two main tabs: "IAM & Admin" and "IAM". The "IAM & Admin" tab is selected, indicated by a blue bar and a bell icon. On the left side, there is a sidebar with several options: "IAM" (selected), "PAM" (NEW), "Identity & Organization", "Policy Troubleshooter", "Policy Analyzer" (NEW), and "Organization Policies". To the right of the sidebar, the main content area is titled "Permissions for [REDACTED]" and contains the message "These permissions affect [REDACTED]". At the bottom, there are buttons for "VIEW BY PRINCIPLE" and "GRANT ACCESS". A large yellow "S" is overlaid on the right side of the screenshot.

1. In the row for Compute Engine default service account, click **the edit icon**.

Type	Principal ↑	Name	Role
<input type="checkbox"/>	541971627853-compute@developer.gserviceaccount.com	Compute Engine default service account	Editor

Edit principal

in the Edit permissions pane, do the following:

1. Click **Add another role**.
2. In the Select a role list, **select Cloud SQL**, and then select **Cloud SQL Client**.
3. Click **Save**.

Edit access to "My Project 16334"

Principal [?](#) Project
541971627853-compute@developer.gserviceaccount.com My Project 16334

Assign roles

Roles are composed of sets of permissions and determine what the principal can do with this resource. [Learn more](#)

Role [Editor](#) **IAM condition (optional)** [?](#) [+ ADD IAM CONDITION](#)

View, create, update, and delete most Google Cloud resources. See the list of included permissions.

Role [Cloud SQL Client](#) **IAM condition (optional)** [?](#) [+ ADD IAM CONDITION](#)

Connectivity access to Cloud SQL instances.

[+ ADD ANOTHER ROLE](#)

SAVE **TEST CHANGES** **CANCEL**

1- open the cloud shell.

• • •

2- run the following code:

```
cloudshell_open --repo_url \
"https://github.com/GoogleCloudPlatform/golang-samples" \
--dir \
"cloudsql/mysql/database-sql" \
--force_new_clone
```

Welcome to Cloud Shell! Type "help" to get started.

Your Cloud Platform project in this session is set to **euphoric-truth-422920-i0**.

Use "gcloud config set project [PROJECT_ID]" to change to a different project.

```
rahaf5747@cloudshell:~ (euphoric-truth-422920-i0)$ cloudshell_open --repo_url \
"https://github.com/GoogleCloudPlatform/golang-samples" \
--dir \
"cloudsql/mysql/database-sql" \
--force_new_clone
```

Build a Docker container and
publish it to Container

Registry:

**gcloud builds submit --tag
\ gcr.io/euphoric-truth-
422920-i0/run-sql**

```
ID: dc57f2df-ee9f-41e4-bb76-22ffdfcd4dc
CREATE_TIME: 2024-06-04T22:52:48+00:00
DURATION: 1M56S
SOURCE: gs://euphoric-truth-422920-i0_cloudbuild/source/1717541566.037387-7d173edf86b242abaaddf7f2b884aa22.tgz
IMAGES: gcr.io/euphoric-truth-422920-i0/run-sql (+1 more)
STATUS: SUCCESS
rahaf5747@cloudshell:~/cloudshell_open/golang-samples/cloudsql/mysql/database-sql (euphoric-truth-422920-i0)$
```

1.In the Google Cloud console, go to

Cloud Run

- 1.Click **Create service**.
- 2.In the Container image URL field, click **Select**.
- 3.In the Select container image pane, complete the following steps:
 - a.In the Container registry tab, expand **gcr.io/euphoric-truth-422920-i0/run-sql**.
 - b.Select the **latest** image.
 - c.Click **Select**.

Select container image

ARTIFACT REGISTRY

CONTAINER REGISTRY

Project: euphoric-truth-422920-i0 [CHANGE](#)

- ▶ Demo containers
- ▶ gcr.io/euphoric-truth-422920-i0
- ▼ us.gcr.io/euphoric-truth-422920-i0
 - ▼ app-engine-tmp/app/default/ttl-18h
 - af37bd296c aa726a79-e298-4041-... latest 1 hour ago
 - ▼ app-engine-tmp/build-cache/default/ttl-7d
 - 9c004d6da1 latest 1 hour ago

SELECT

CANCEL

In the Authentication section, select **Allow unauthenticated invocations**.

Container image URL
us.gcr.io/euphoric-truth-422920-i0/app-engine-tmp/build-cache/default/t [SELECT](#)

TEST WITH A SAMPLE CONTAINER

Should listen for HTTP requests on \$PORT and not rely on local state. [How to build a container?](#)

Configure

Service name *

ttl-7d

Region *

us-central1 (Iowa)

[How to pick a region?](#)

Authentication *

Allow unauthenticated invocations

Check this if you are creating a public API or website.

Require authentication

Manage authorized users with Cloud IAM.

1. Expand Container, Variables & Secrets, Connections, Security.
2. Click the **Variables & secrets** tab.

Container(s), Volumes, Networking, Security ^

CONTAINER(S) VOLUMES NETWORKING SECURITY

^ Edit Container

Container image URL
us.gcr.io/euphoric-truth-422920-i0/app-engine-tmp/build-cache/default/ttl-7d@sha256:9c004d6da108c7e0d533980ddc7d820ff055c04d190e419f79c6f6c5fd62a

Container port
8080

Requests will be sent to the container on this port. We recommend listening on \$PORT instead of this specific number.

SETTINGS **VARIABLES & SECRETS** VOLUME MOUNTS

Environment variables

+ ADD VARIABLE

Secrets exposed as environment variables

create five variable with values

Environment variables

Name 1 —
INSTANCE_CONNECTION_NAME

e.g. ENV

Name 2 —
CLOUD_SQL_CONNECTION_NAN

e.g. ENV

Name 3 —
DB_NAME

e.g. ENV

Name 4 —
DB_USER

e.g. ENV

Name 5 —
DB_PASS

e.g. ENV

Value 1 —
euphoric-truth-422920-i0:us-cent

e.g. prod

Value 2 —
cloud-run-mysql-instance

e.g. prod

Value 3 —
db

e.g. prod

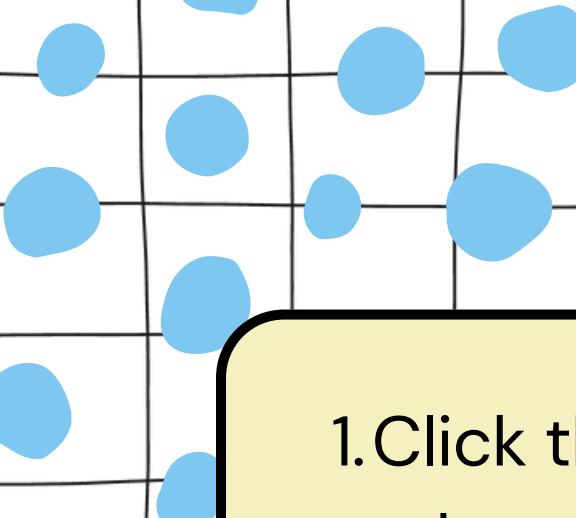
Value 4 —
mysql-user

e.g. prod

Value 5 —
password

e.g. prod



- 
- 1. Click the **Connections** tab, and then do the following:
 - 2. Click **Add connection**.

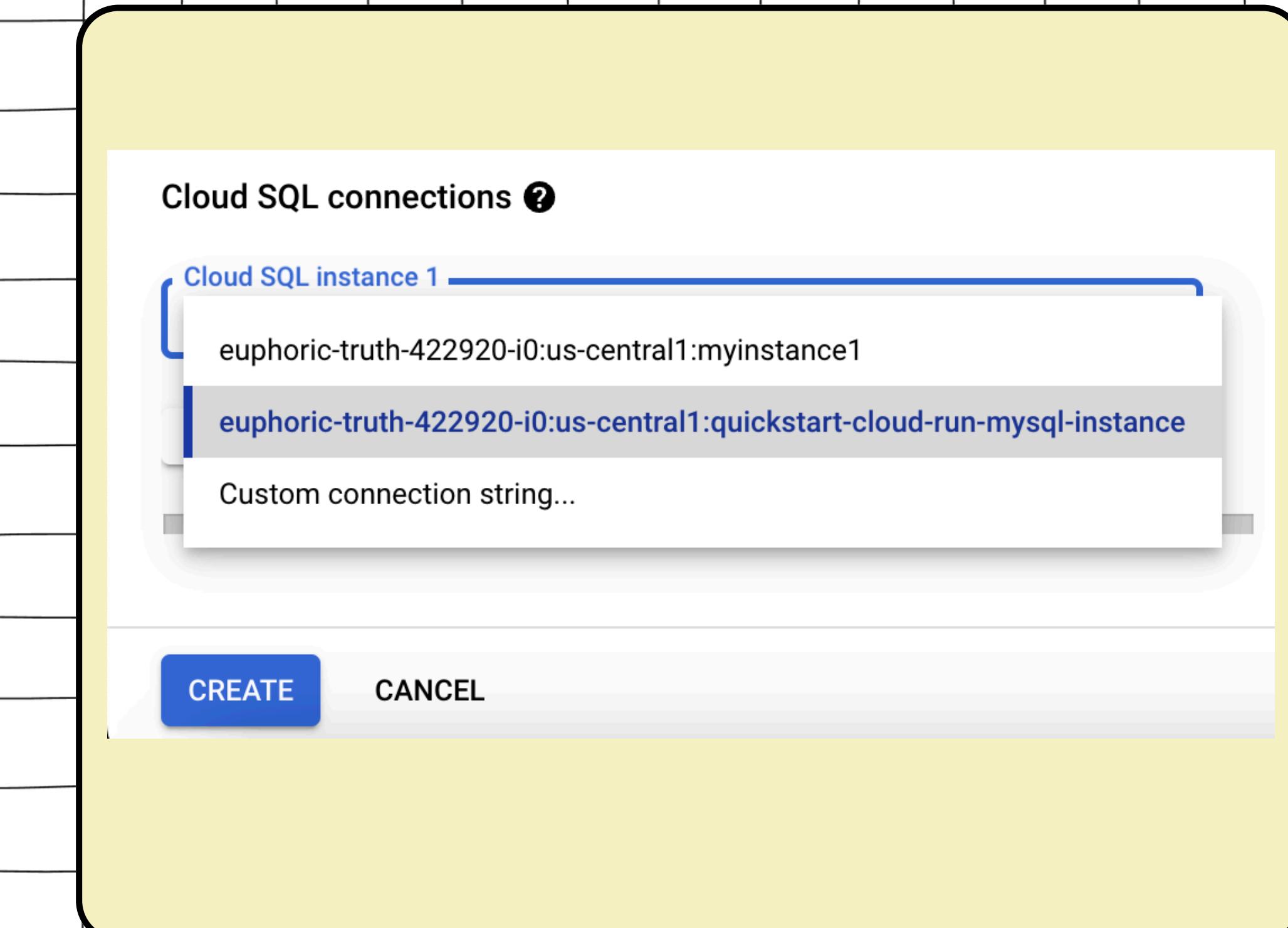


Cloud SQL connections

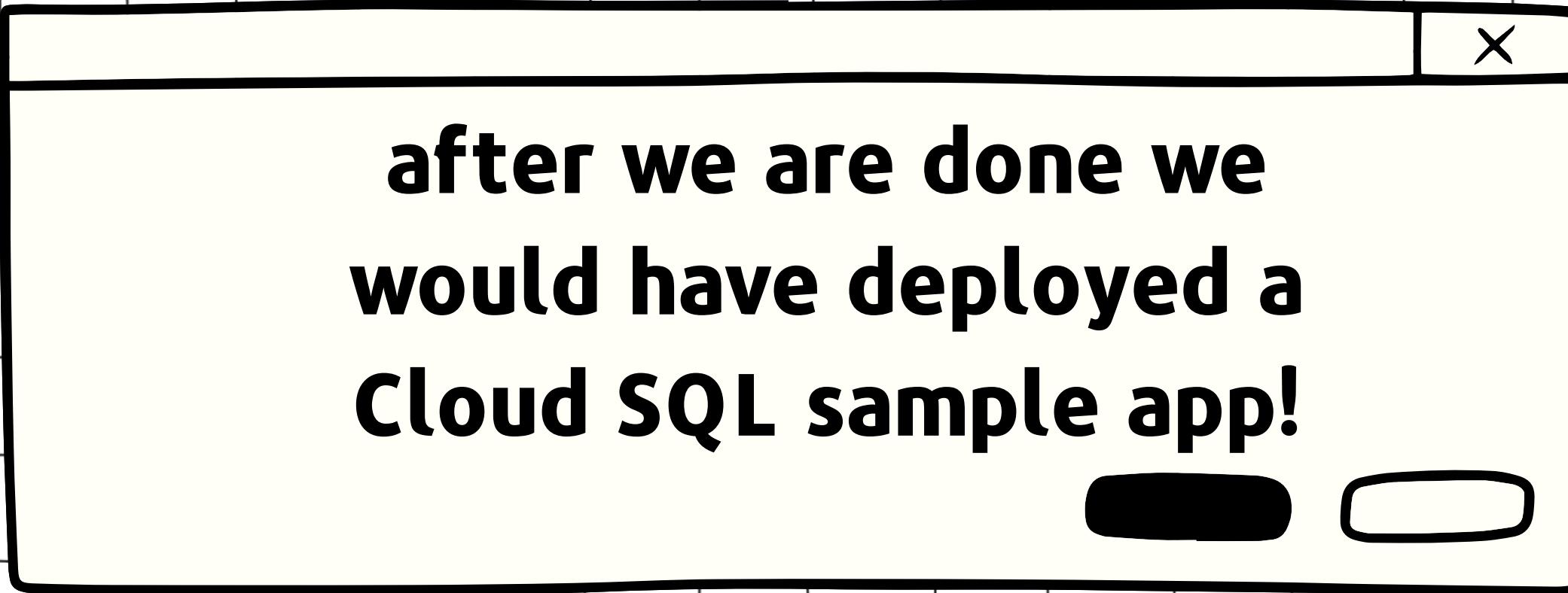
 **ADD CONNECTION**

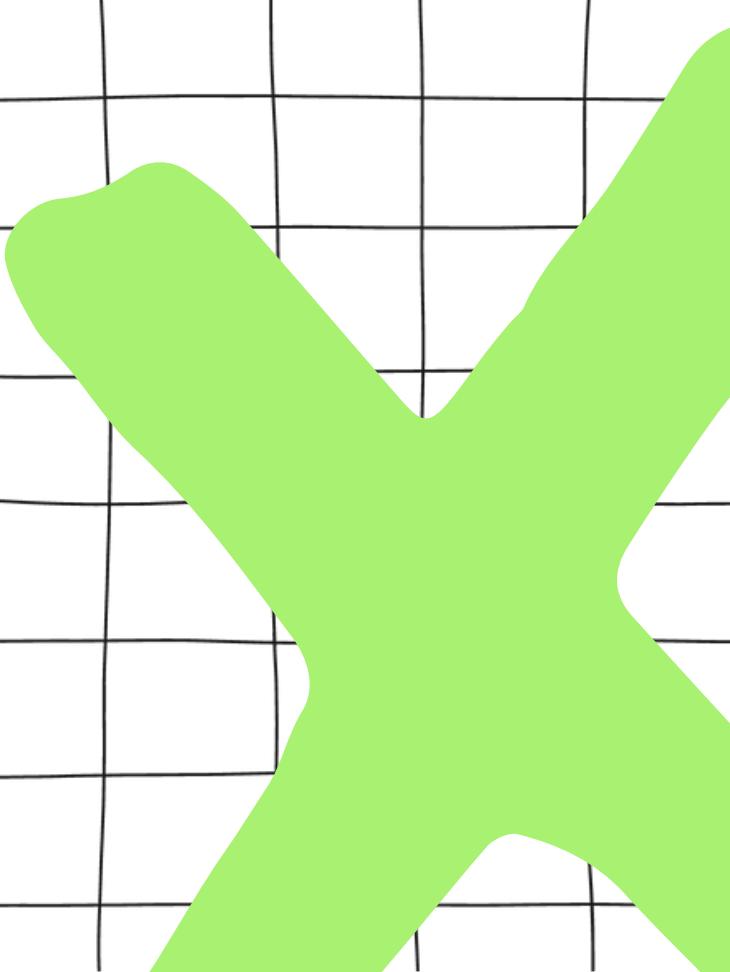
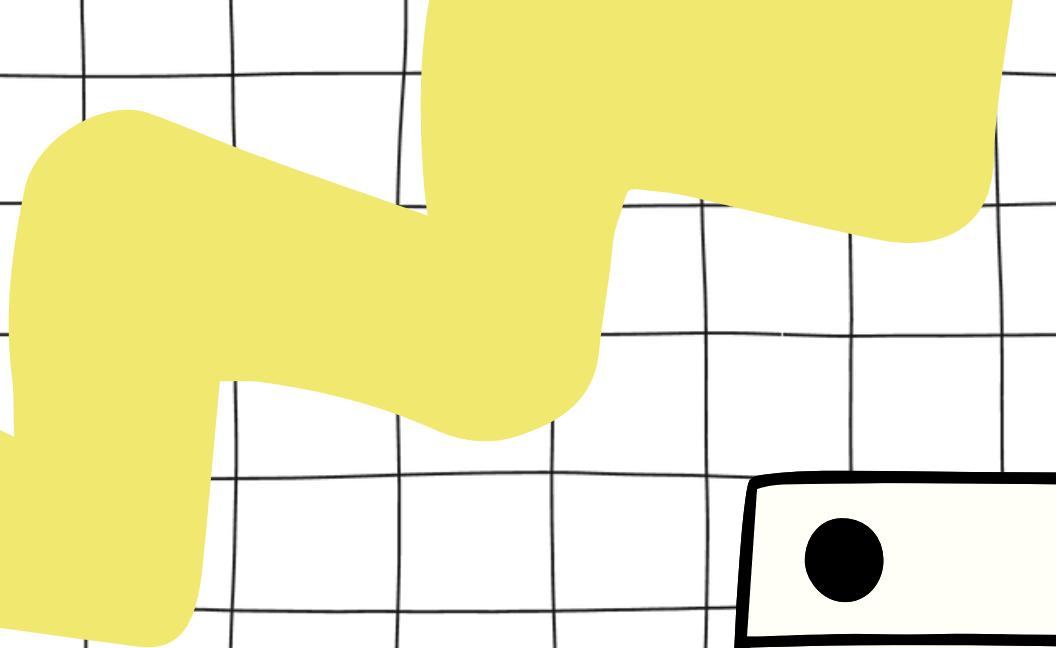
s

1. Click the **Connections** tab, and then do the following:
2. Click **Add connection**.
3. In the Cloud SQL instance 1 field, select **euphoric-truth-422920-i0:us-central1:quickstart-cloud-run-mysql-instance**.
4. To create the Cloud Run service, click **Create**.



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Thank you

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