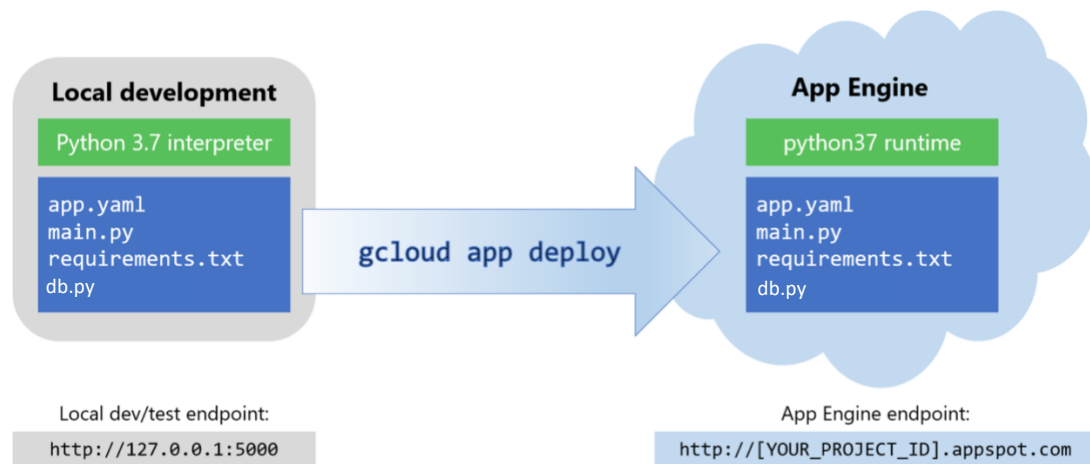


Architectural Diagram

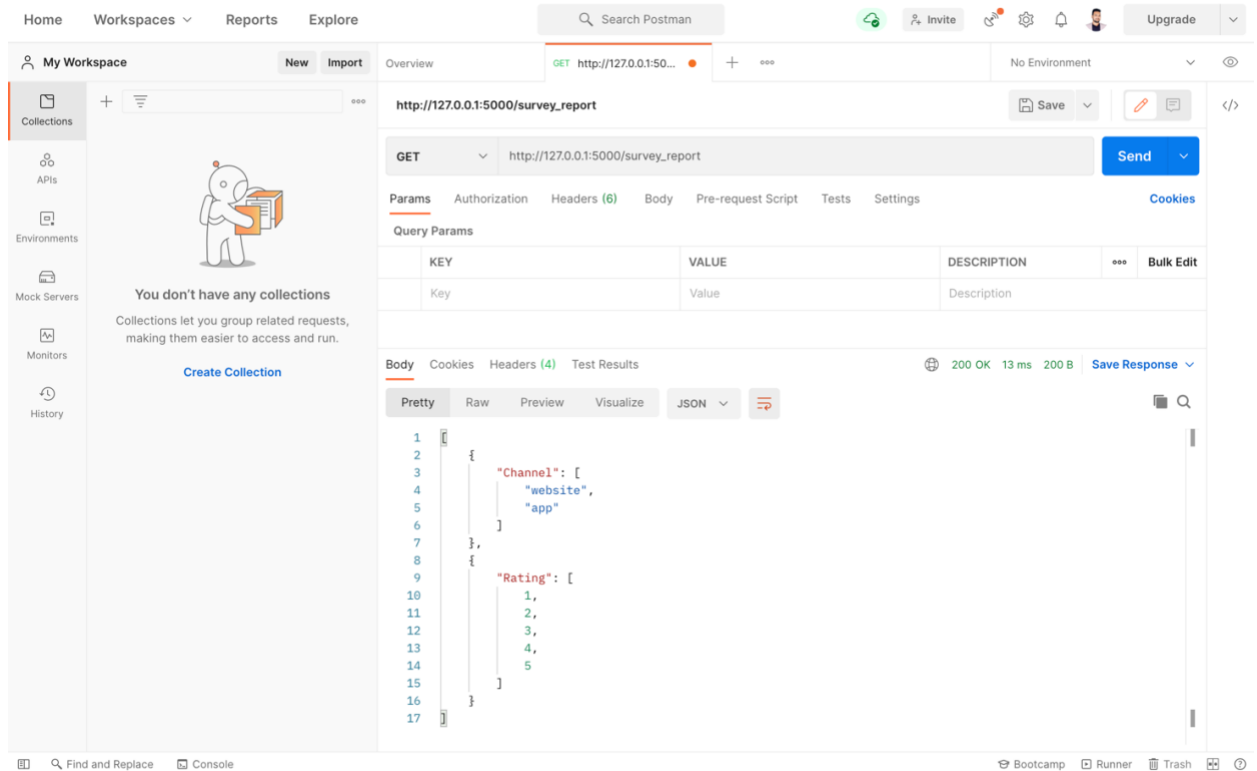


Deploying a Python app to Google Cloud

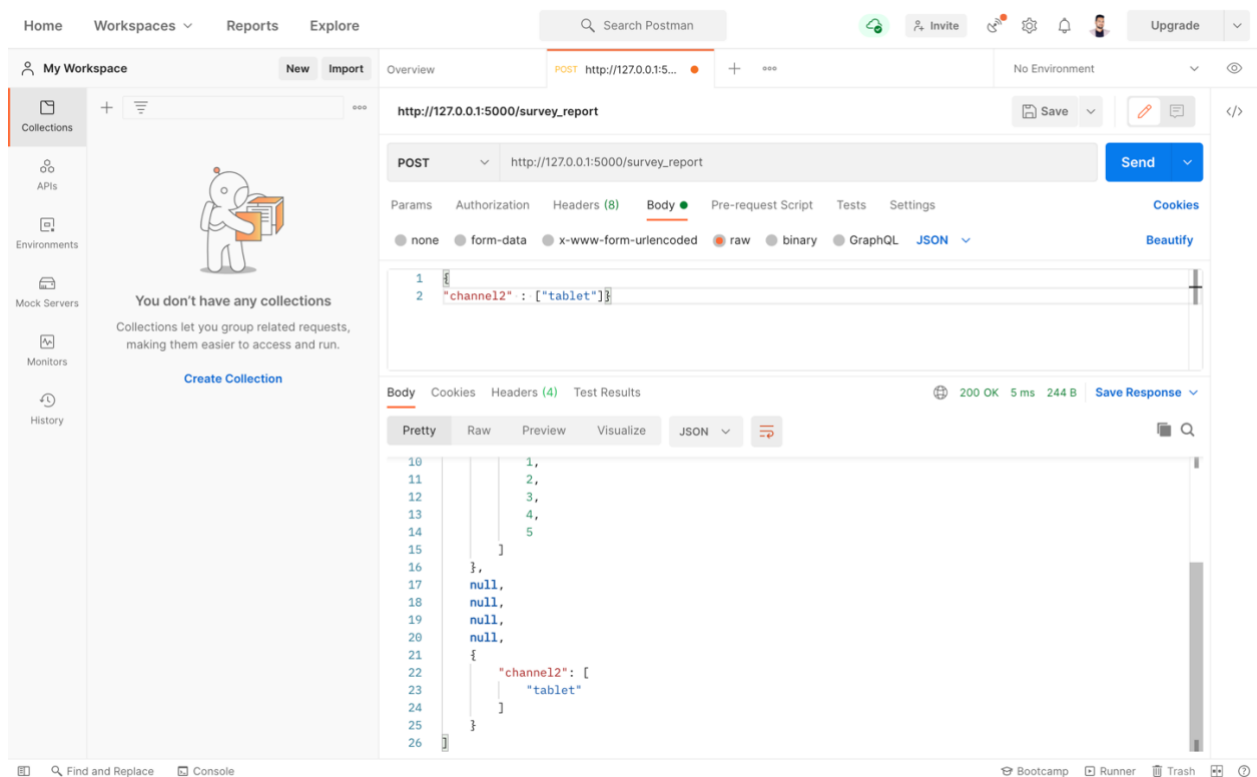
**Reference [1]**

## Local

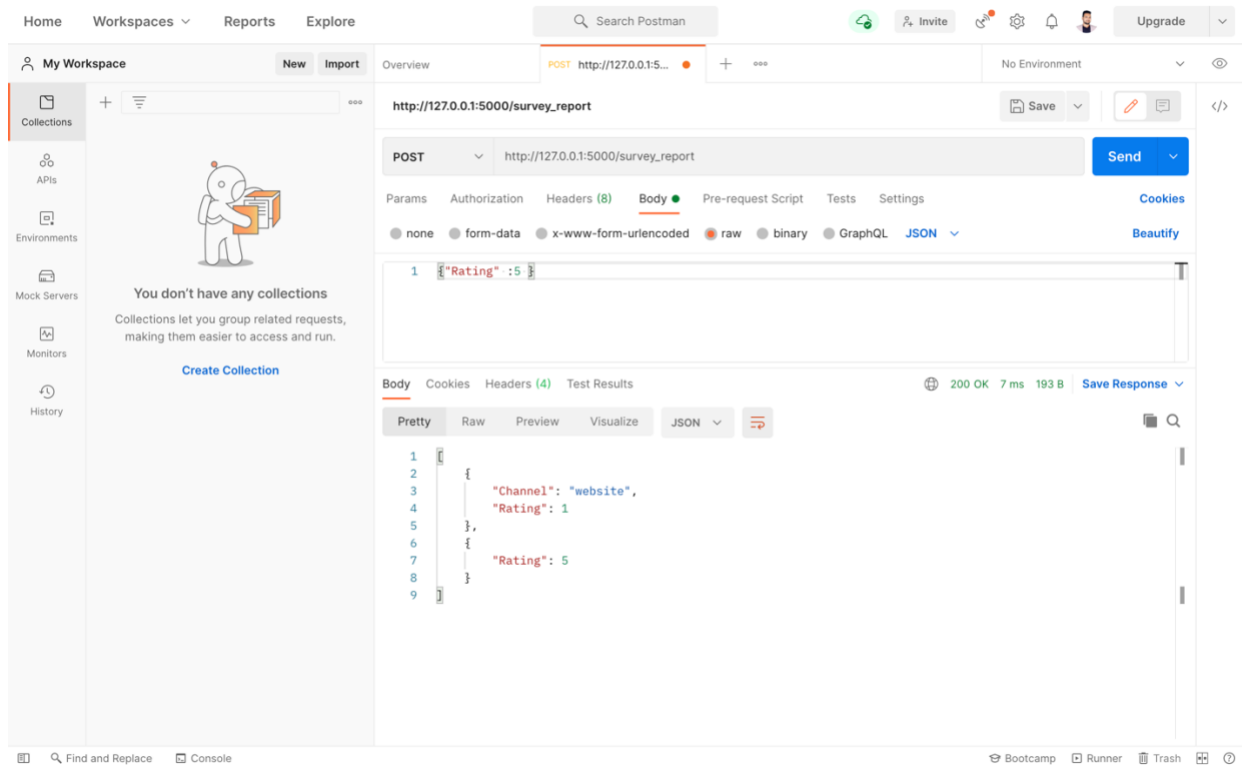
1. The local API is being tested using POSTMAN, for GET request.



2. The local API is being tested using POSTMAN, for POST request.

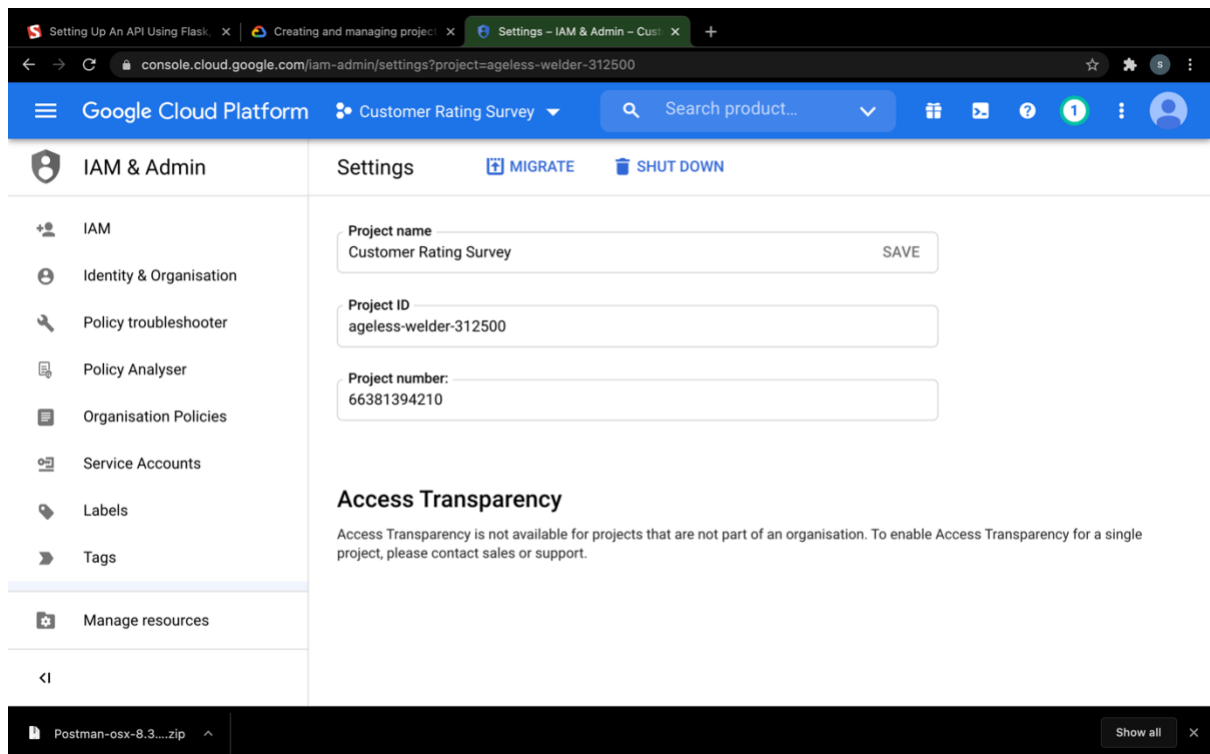


2. POST request being tested to handle errors.



## CLOUD

1. Initiating the gcloud project.



2. Initiating gcloud SQL instance.

Create a MySQL instance - SQL

console.cloud.google.com/sql/instances/create;engine=MySQL?project=ageless-welder-312500

Google Cloud Platform

Customer Rating Survey

Search product...

2

Create a MySQL instance

Instance info

Instance ID \*

customer-survey-rating-12345

Use lowercase letters, numbers and hyphens. Start with a letter.

Password \*

GENERATE

Set a password for the root user. [Learn more](#)

☐ No password

Database version \*

MySQL 8.0

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.

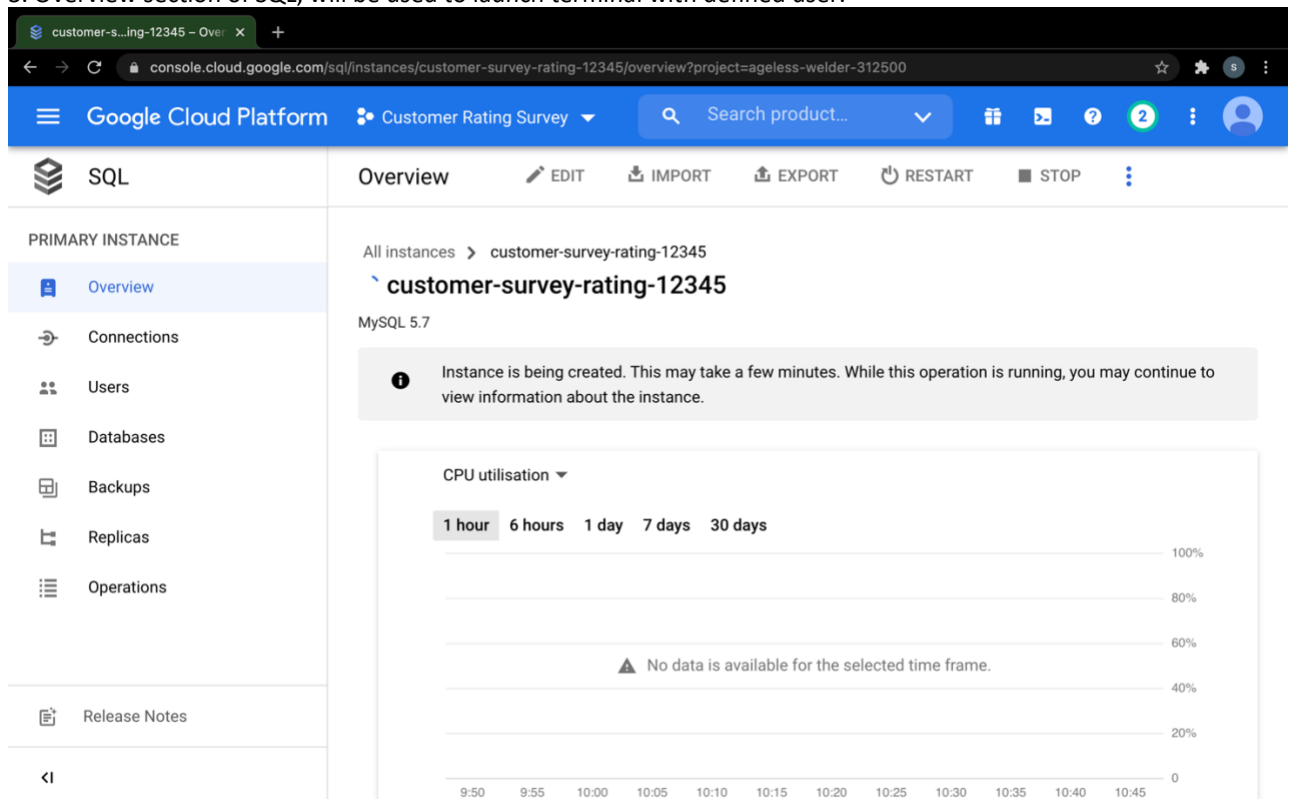
Region

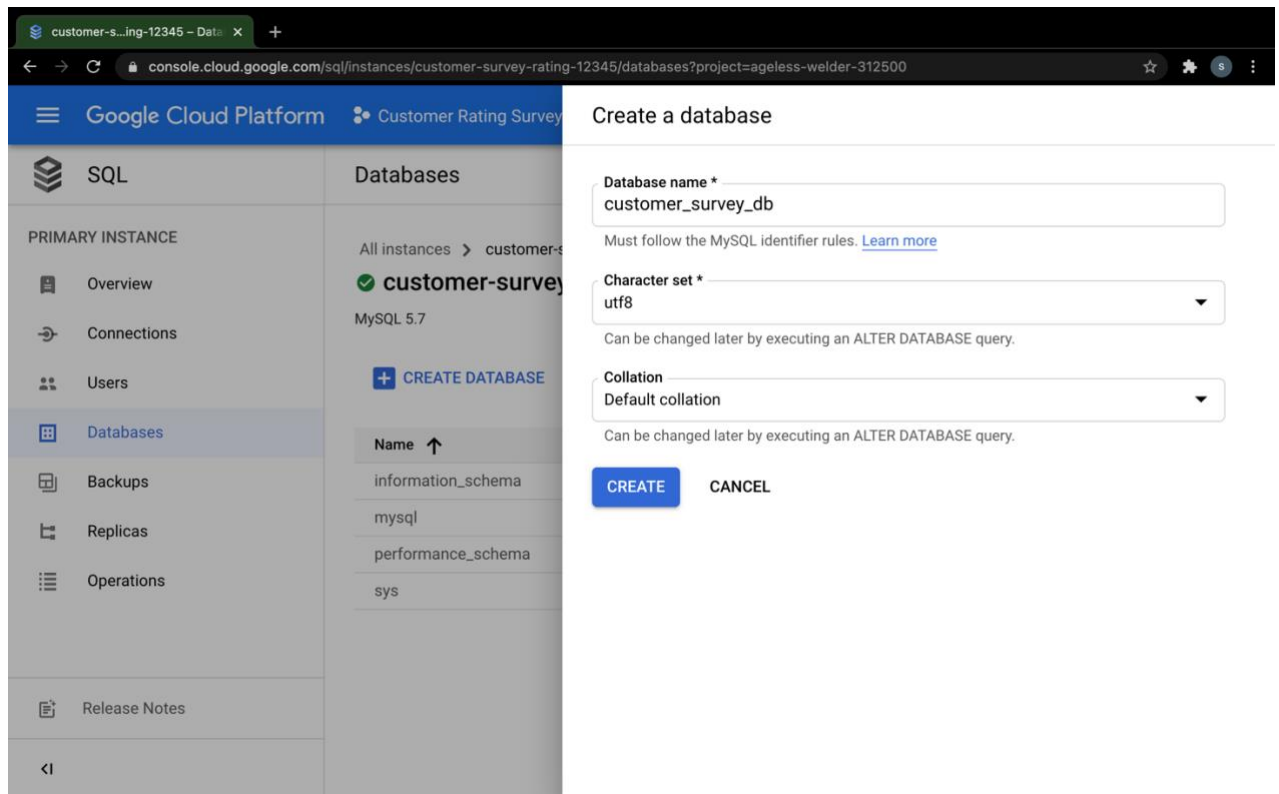
us-central1 (Iowa)

Summary

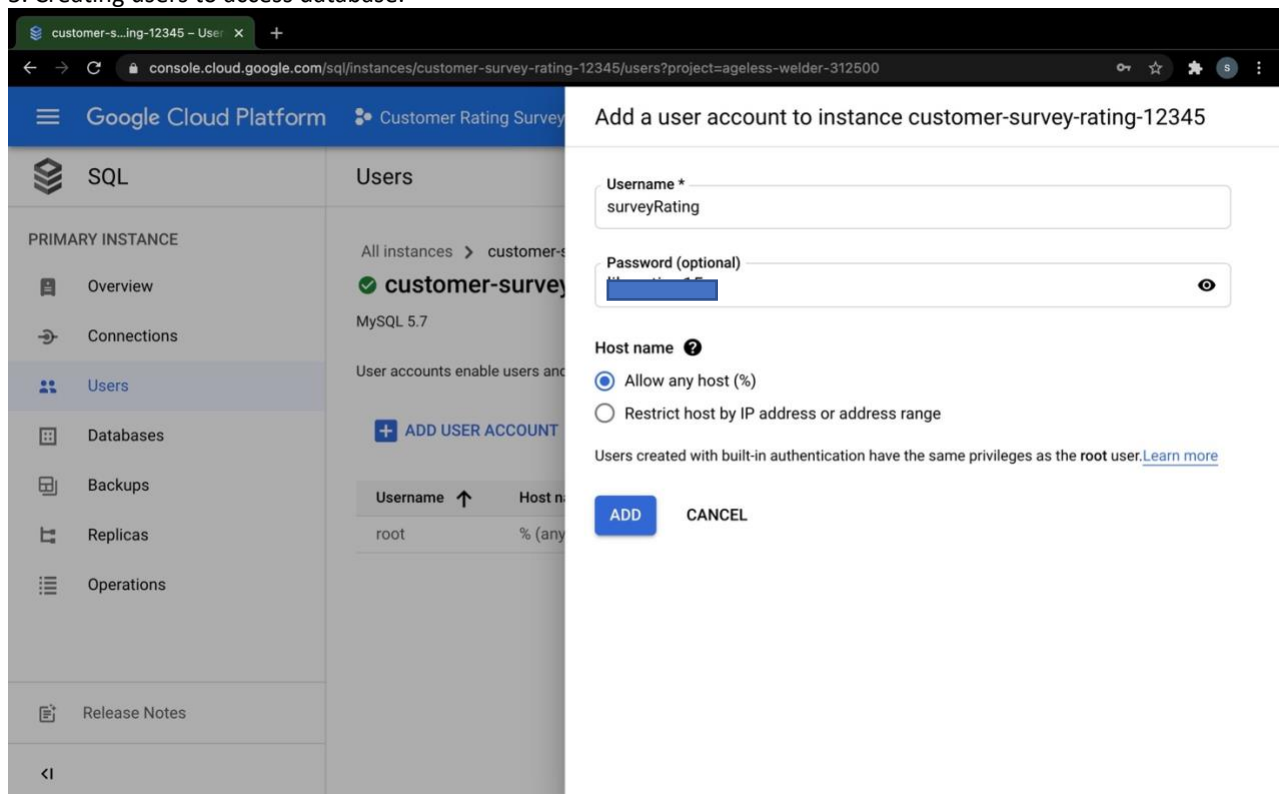
Region	us-central1 (Iowa)
DB version	MySQL 8.0
vCPUs	4 vCPU
Memory	26 GB
Storage	100 GB
Network throughput (MB/s)	1,000 of 2,000
Disk throughput (MB/s)	Read: 48.0 of 240.0 Write: 48.0 of 240.0
IOPS	Read: 3,000 of 15,000 Write: 3,000 of 15,000
Connections	Public IP
Backup	Automated
Availability	Multiple zones (highly available)
Point-in-time recovery	Enabled

3. Overview section of SQL, will be used to launch terminal with defined user.





##### 5. Creating users to access database.



##### 6. Initiating connection, i.e. making the IP address public for accessibility.

customer-s...ing-12345 - Con...

console.cloud.google.com/sql/instances/customer-survey-rating-12345/connections?project=ageless-welder-312500

Google Cloud Platform Customer Rating Survey Search products and resources

SQL

PRIMARY INSTANCE

- Overview
- Connections
- Users
- Databases
- Backups
- Replicas
- Operations
- Release Notes

Connections

All instances > customer-survey-rating-12345

customer-survey-rating-12345

MySQL 5.7

Networking

Choose a network path for connecting to this instance. For extra security, consider using the Cloud SQL proxy. [Learn more](#)

☐ Private IP  
Requires additional APIs and permissions, which may require your system admin. Can't be disabled once enabled. [Learn more](#)

☒ Public IP  
Authorise a network or use [Cloud SQL Proxy](#) to connect to this instance. [Learn more](#)

Authorised networks

New network

Name  
customerRatingNetwork

Use CIDR notation [↗](#)

Network \*  
101.116.206.161/32  
Example: 199.27.25.0/24

CANCEL DONE

## 7. Using gcloud MYSQL to create table survey\_report within database customer\_survey\_db.

customer-s...ing-12345 - User...

console.cloud.google.com/sql/instances/customer-survey-rating-12345/users?project=ageless-welder-312500

Google Cloud Platform Customer Rating Survey Search products and resources

SQL

PRIMARY INSTANCE

- Overview
- Connections
- Users
- Databases
- Backups
- Replicas
- Operations
- Release Notes

Users

All instances > customer-survey-rating-12345

customer-survey-rating-12345

MySQL 5.7

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

ADD USER ACCOUNT

Username	Host name
root	% (any host)
surveyRating	% (any host)

CLOUD SHELL Terminal (ageless-welder-312500) Open editor

```
Type 'help;' or 'h' for help. Type 'c' to clear the current input statement.

mysql> gcloud sql connect
--> show databases;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'gcloud sql connect
show databases' at line 1
mysql> show databases;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '> show databases' at line 1
mysql> show databases;
--> show schemas
--> show schemas;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'show schemas
show schemas' at line 2
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| customer_survey_db |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.19 sec)

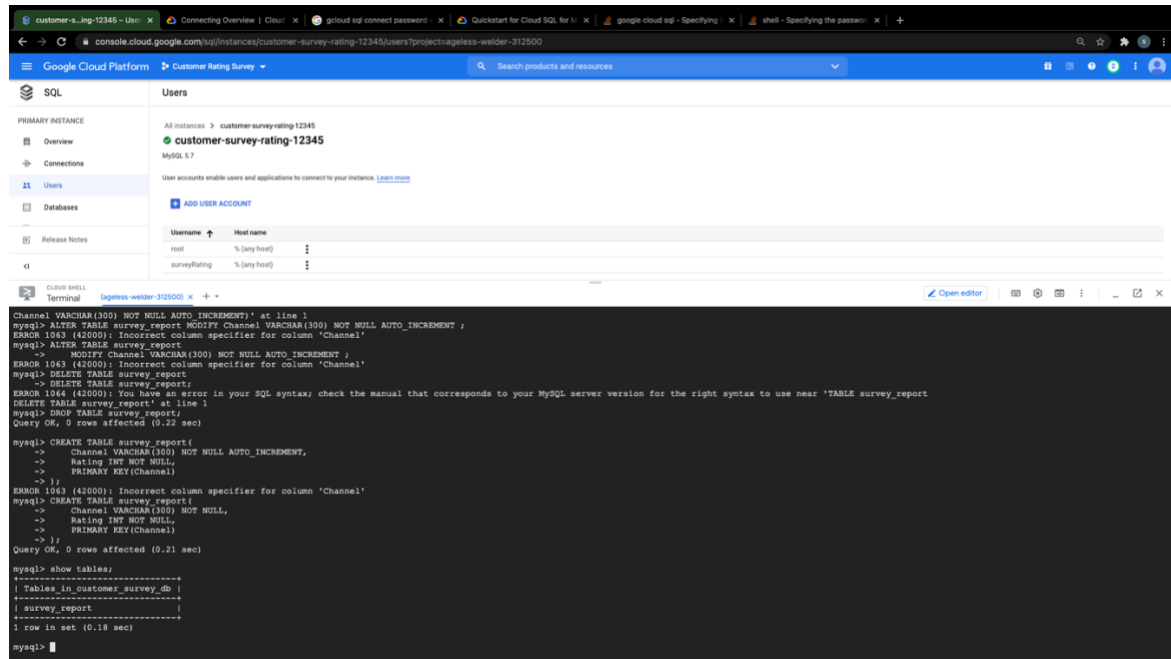
mysql> USE customer_survey_db;
Database changed
mysql> CREATE TABLE survey_report(
--> Channel VARCHAR(100) NOT NULL,
--> Rating INT NOT NULL,
--> PRIMARY KEY(Channel)
--> );
Query OK, 0 rows affected (0.22 sec)

mysql>
```

## 8.Tables created

```
mysql> show tables;  
+-----+  
| Tables_in_customer_survey_db |  
+-----+  
| survey_report                 |  
+-----+  
1 row in set (0.18 sec)  
  
mysql>
```

### 9. Adding values into table survey\_report using MYSQL statements.



## 10.Initialising google cloud sdk within local device.

```

Not Installed anthos-auth 16.3 MiB
Not Installed config-connector 45.1 MiB
Not Installed gcloud Alpha Commands alpha < 1 MiB
Not Installed gcloud Beta Commands beta < 1 MiB
Not Installed gcloud app Java Extensions app-engine-java 83.1 MiB
Not Installed gcloud app PHP Extensions app-engine-php 21.9 MiB
Not Installed gcloud app Python Extensions app-engine-python 6.1 MiB
Not Installed gcloud app Python Extensions (Extra Libraries) app-engine-python-extras 27.1 MiB
Not Installed kpt kpt 12.2 MiB
Not Installed kubectrl kubectrl < 1 MiB
Not Installed kubectrl-oidc kubectrl-oidc 16.3 MiB
Not Installed pkg pkg
Installed BigQuery Command Line Tool bq < 1 MiB
Installed Cloud SDK Core Libraries core 18.1 MiB
Installed Cloud Storage Command Line Tool gsutil 3.9 MiB

```

```

To install or remove components at your current SDK version [338.0.0], run:
$ gcloud components install COMPONENT_ID
$ gcloud components remove COMPONENT_ID

To update your SDK installation to the latest version [338.0.0], run:
$ gcloud components update

Modify profile to update your $PATH and enable shell command completion?

Do you want to continue (Y/n)? Y

The Google Cloud SDK installer will now prompt you to update an rc file to bring the Google Cloud CLIs into your environment.

Enter a path to an rc file to update, or leave blank to use [/Users/sreetankumardev/.bash_profile]:
No changes necessary for [/Users/sreetankumardev/.bash_profile].

For more information on how to get started, please visit:
https://cloud.google.com/sdk/docs/quickstarts

(base) sreetams-MBP:api sreetankumardev$ gcloud --v
Google Cloud SDK 338.0.0
bw 2.0.67
core 2021.04.23
gsutil 4.61
(base) sreetams-MBP:api sreetankumardev$ gcloud config list
[core]
account = azure.sreetamdev@gmail.com
disable_usage_reporting = True
project = ageless-welder-312500
[gccloudignore]
enabled = true

Your active configuration is: [default]
(base) sreetams-MBP:api sreetankumardev$ gcloud app deploy

```

### 11.deploying app and viewing request by using command 'gcloud app deploy' and 'gcloud app browse'

```
(base) sreetams-MBP:ADDAXIS sreetankumardev$ ls
api
(base) sreetams-MBP:ADDAXIS sreetankumardev$ cd api
(base) sreetams-MBP:api sreetankumardev$ ls
app.yaml          db.py             main.py           requirements.txt
(base) sreetams-MBP:api sreetankumardev$ gcloud --v
Google Cloud SDK 338.0.0
bq 2.0.67
core 2021.04.23
gsutil 4.61
(base) sreetams-MBP:api sreetankumardev$ gcloud config list
[core]
account = azure.sreetamdev@gmail.com
disable_usage_reporting = True
project = ageless-welder-312500
[gccloudignore]
enabled = true

Your active configuration is: [default]
(base) sreetams-MBP:api sreetankumardev$ gcloud app deploy
Services to deploy:

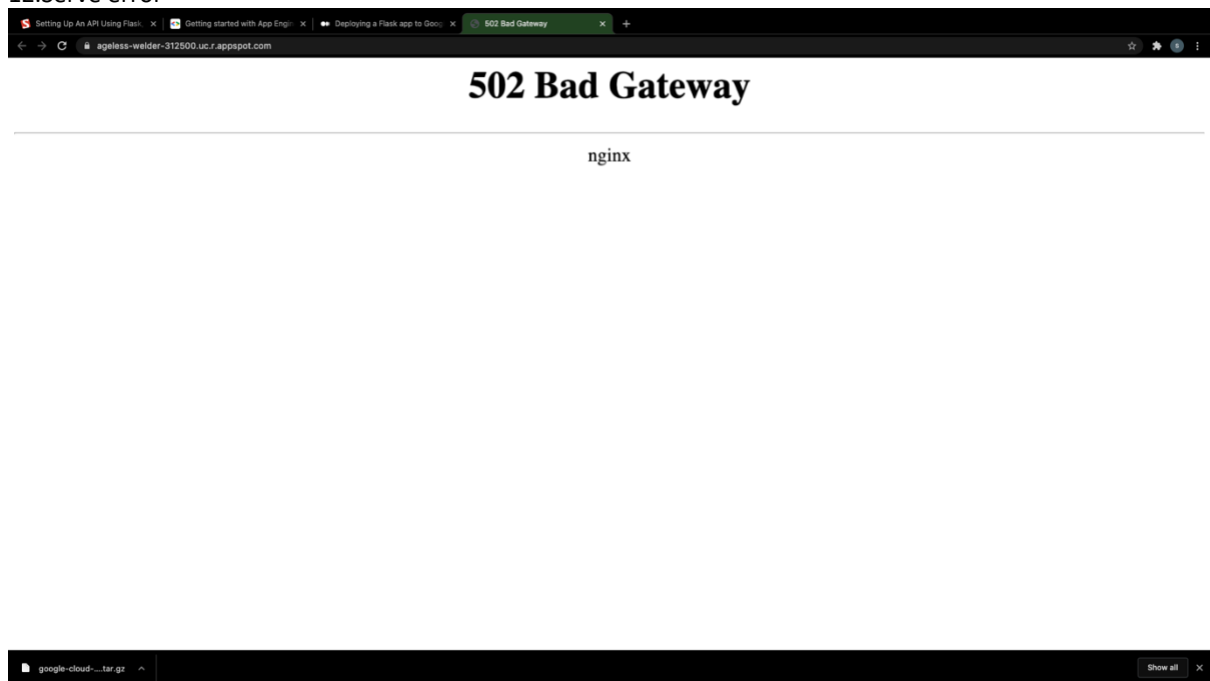
descriptor:      [/Users/sreetankumardev/Desktop/ADDAXIS/api/app.yaml]
source:          [/Users/sreetankumardev/Desktop/ADDAXIS/api]
target project:  [ageless-welder-312500]
target service:  [default]
target version:  [20210502t225442]
target url:      [https://ageless-welder-312500.uc.r.appspot.com]

Do you want to continue (Y/n)? Y
Beginning deployment of service [default]...
[Progress bar: Uploading 1 file to Google Cloud Storage]
File upload done.
Updating service [default]...done.
Setting traffic split for service [default]...done.
Deployed service [default] to [https://ageless-welder-312500.uc.r.appspot.com]

You can stream logs from the command line by running:
$ gcloud app logs tail -s default

To view your application in the web browser run:
$ gcloud app browse
(base) sreetams-MBP:api sreetankumardev$
```

## 12.Serve error



## References

1.Retrieved from [https://medium.com/@dmahugh\\_70618/deploying-a-flask-app-to-google-app-engine-faa883b5ffab](https://medium.com/@dmahugh_70618/deploying-a-flask-app-to-google-app-engine-faa883b5ffab)