Cloud Application Development

Assignment 2

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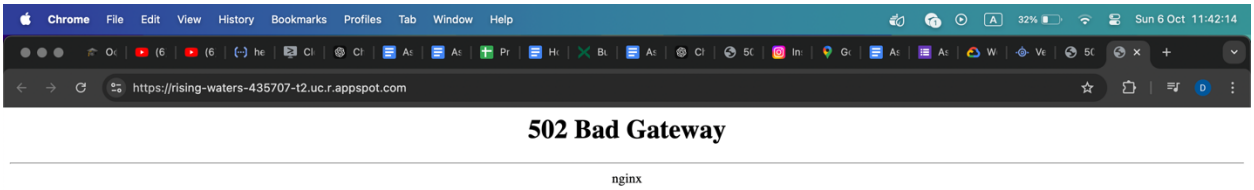
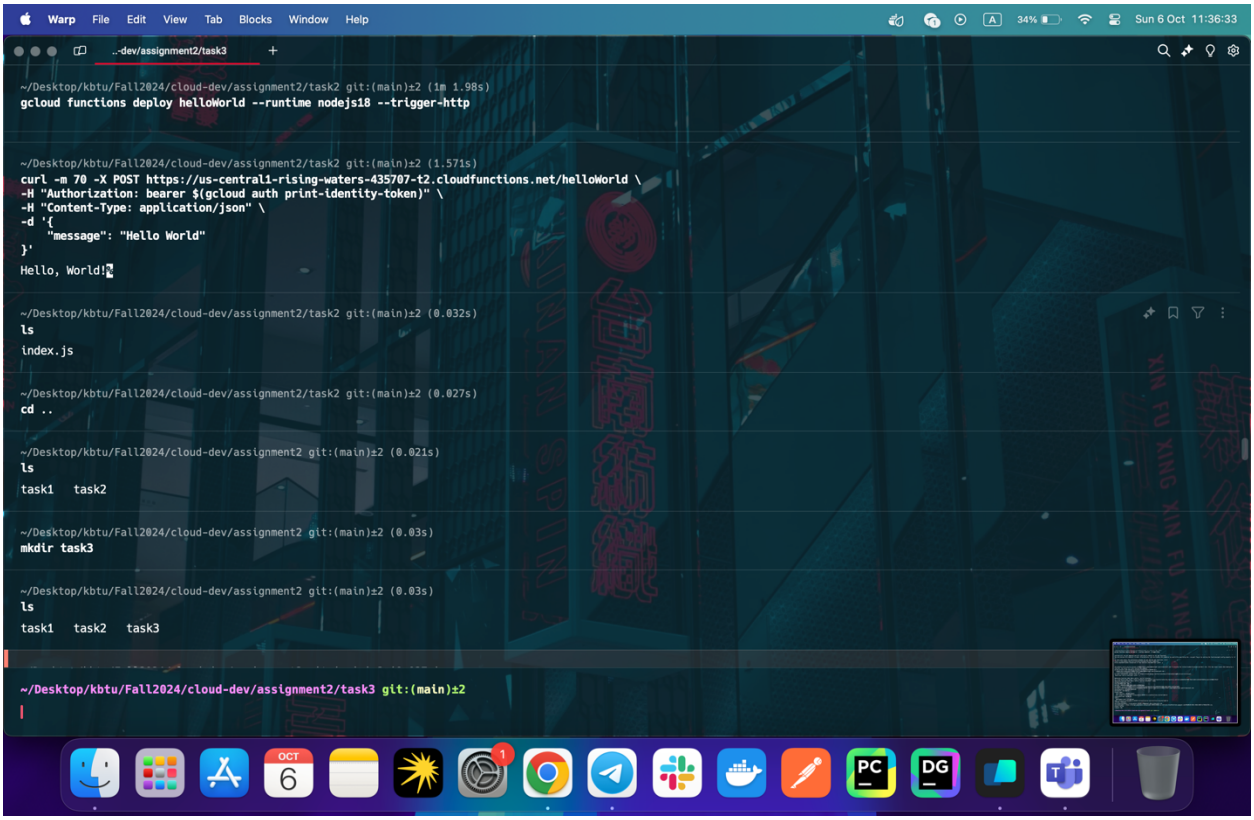
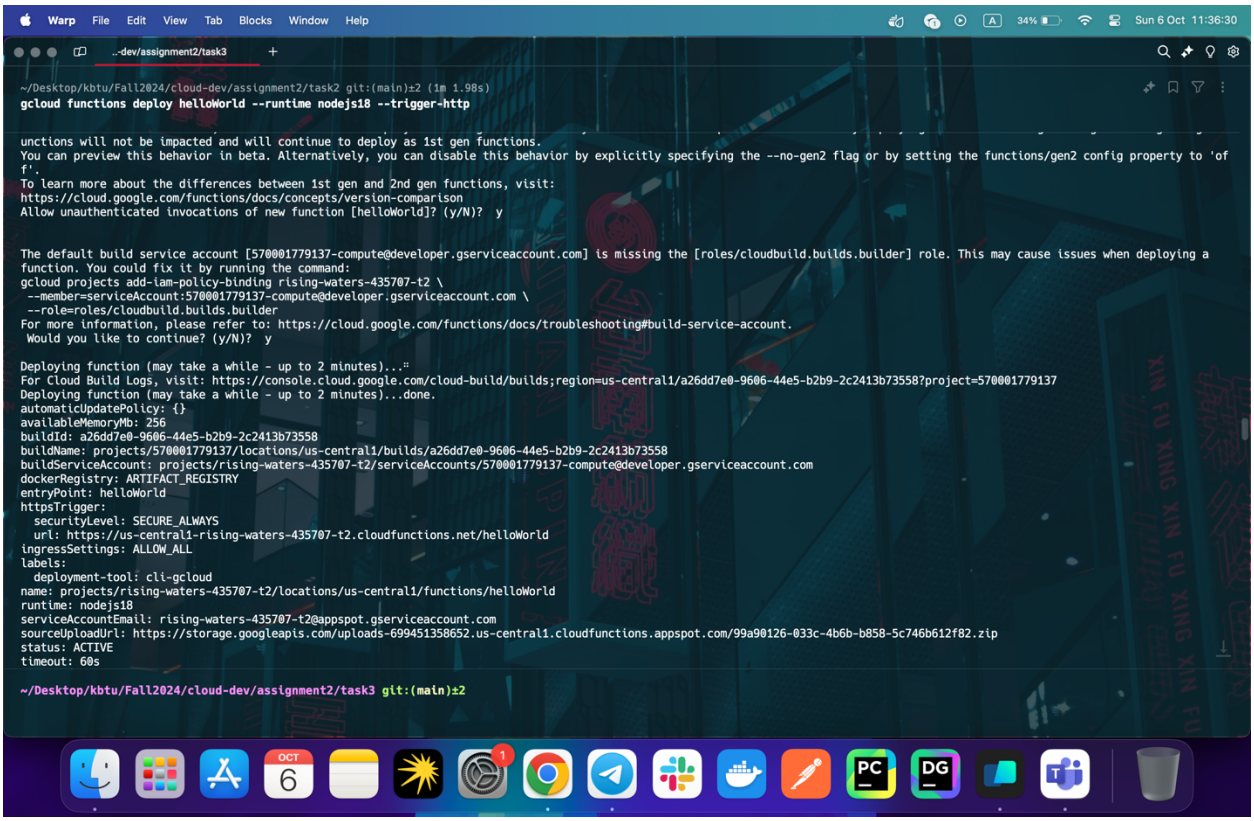
Exercise 1:

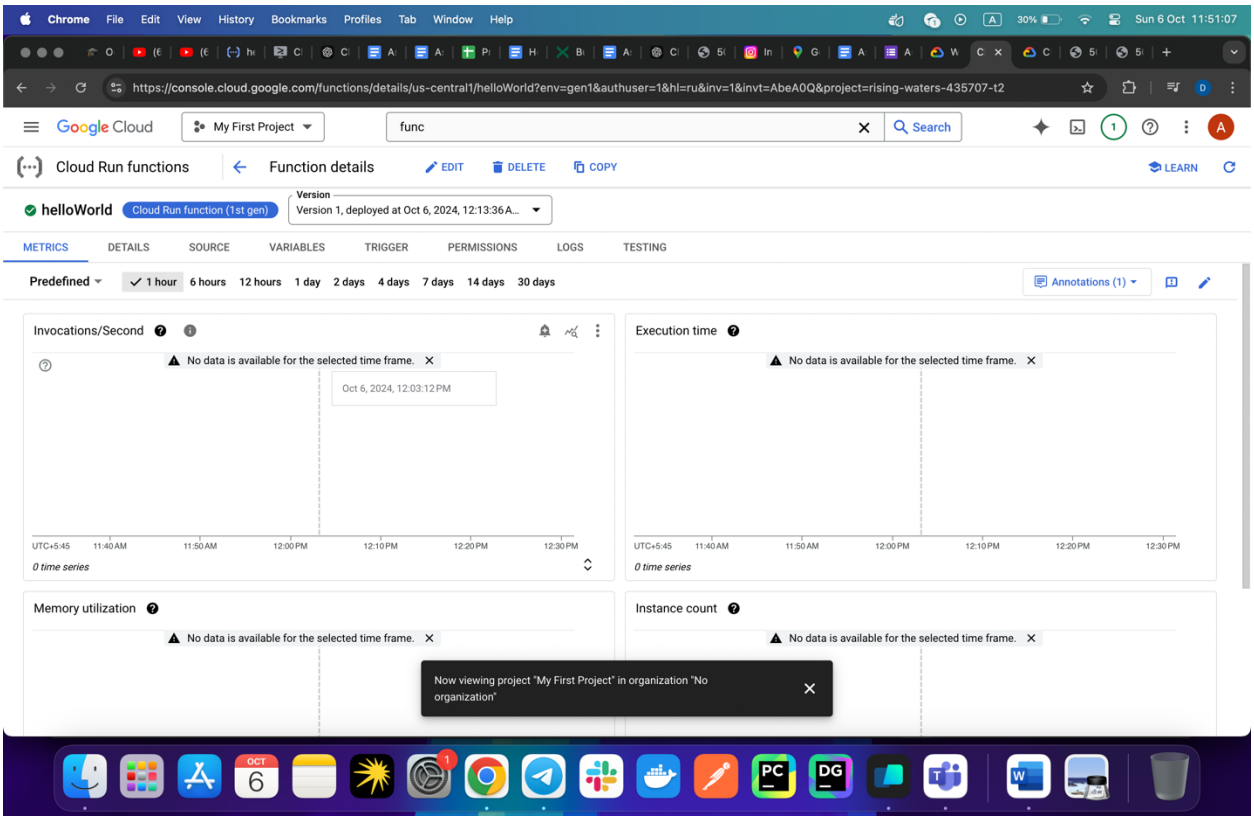

Chrome File Edit View History Bookmarks Profiles Tab Window Help
Sun 6 Oct 11:42:14
https://rising-waters-435707-t2.uc.r.appspot.com
502 Bad Gateway
nginx

Warp File Edit View Tab Blocks Window Help
Sun 6 Oct 11:36:04
..-dev/assignment2/task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (33.524s)
gcloud app deploy
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (1m 20.13s)
gcloud app deploy
Services to deploy:
descriptor: [/Users/dinmukhammedkorganbek/Desktop/kbtu/Fall2024/cloud-dev/assignment2/app.yaml]
source: [/Users/dinmukhammedkorganbek/Desktop/kbtu/Fall2024/cloud-dev/assignment2]
target project: [rising-waters-435707-t2]
target service: [default]
target version: [20241005t235626]
target url: [https://rising-waters-435707-t2.uc.r.appspot.com]
target service account: [rising-waters-435707-t2@appspot.gserviceaccount.com]
Do you want to continue (Y/n)? Y
Beginning deployment of service [default]...
Uploading 0 files to Google Cloud Storage
File upload done.
Updating service [default]...done.
Setting traffic split for service [default]...done.
Deployed service [default] to [https://rising-waters-435707-t2.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
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (0.03s)
ls
app.py app.yaml
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2

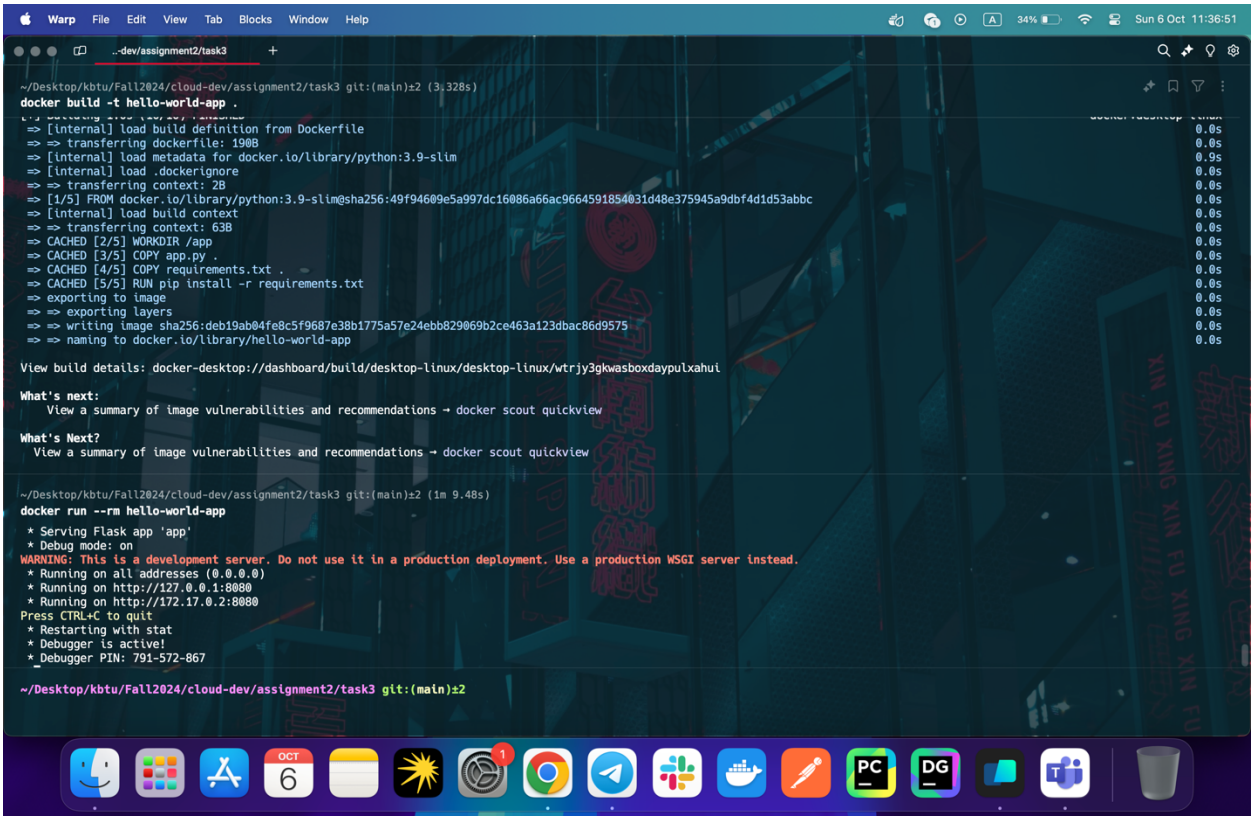
Exercise 2:


Warp File Edit View Tab Blocks Window Help
Sun 6 Oct 11:36:33
..-dev/assignment2/task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task2 git:(main)±2 (1m 1.98s)
gcloud functions deploy helloWorld --runtime nodejs18 --trigger-http
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task2 git:(main)±2 (1.571s)
curl -m 70 -X POST https://us-central1-rising-waters-435707-t2.cloudfunctions.net/helloWorld \
-H "Authorization: bearer $(gcloud auth print-identity-token)" \
-H "Content-Type: application/json" \
-d '{
"message": "Hello World"
}'
Hello, World!%
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task2 git:(main)±2 (0.032s)
ls
index.js
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task2 git:(main)±2 (0.027s)
cd ..
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (0.021s)
ls
task1 task2
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (0.03s)
mkdir task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2 git:(main)±2 (0.03s)
ls
task1 task2 task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2


Warp File Edit View Tab Blocks Window Help
Sun 6 Oct 11:36:30
..-dev/assignment2/task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task2 git:(main)±2 (1m 1.98s)
gcloud functions deploy helloWorld --runtime nodejs18 --trigger-http
unctions will not be impacted and will continue to deploy as 1st gen functions.
You can preview this behavior in beta. Alternatively, you can disable this behavior by explicitly specifying the --no-gen2 flag or by setting the functions/gen2 config property to 'of
f'.
To learn more about the differences between 1st gen and 2nd gen functions, visit:
https://cloud.google.com/functions/docs/concepts/version-comparison
Allow unauthenticated invocations of new function [helloWorld]? (y/N)? y
The default build service account [570001779137-compute@developer.gserviceaccount.com] is missing the [roles/cloudbuild.builds.builder] role. This may cause issues when deploying a
function. You could fix it by running the command:
gcloud projects add-iam-policy-binding rising-waters-435707-t2 \
--member=serviceAccount:570001779137-compute@developer.gserviceaccount.com \
--role=roles/cloudbuild.builds.builder
For more information, please refer to: https://cloud.google.com/functions/docs/troubleshooting#build-service-account.
Would you like to continue? (y/N)? y
Deploying function (may take a while - up to 2 minutes)...⠼
For Cloud Build Logs, visit: https://console.cloud.google.com/cloud-build/builds;region=us-central1/a26dd7e0-9606-44e5-b2b9-2c2413b73558?project=570001779137
Deploying function (may take a while - up to 2 minutes)...done.
automaticUpdatePolicy: {}
availableMemoryMb: 256
buildId: a26dd7e0-9606-44e5-b2b9-2c2413b73558
buildName: projects/570001779137/locations/us-central1/builds/a26dd7e0-9606-44e5-b2b9-2c2413b73558
buildServiceAccount: projects/rising-waters-435707-t2/serviceAccounts/570001779137-compute@developer.gserviceaccount.com
dockerRegistry: ARTIFACT_REGISTRY
entryPoint: helloWorld
httpsTrigger:
securityLevel: SECURE_ALWAYS
url: https://us-central1-rising-waters-435707-t2.cloudfunctions.net/helloWorld
ingressSettings: ALLOW_ALL
labels:
deployment-tool: cli-gcloud
name: projects/rising-waters-435707-t2/locations/us-central1/functions/helloWorld
runtime: nodejs18
serviceAccountEmail: rising-waters-435707-t2@appspot.gserviceaccount.com
sourceUploadUrl: https://storage.googleapis.com/uploads-699451358652.us-central1.cloudfunctions.appspot.com/99a90126-033c-4b6b-b858-5c746b612f82.zip
status: ACTIVE
timeout: 60s
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2


Chrome File Edit View History Bookmarks Profiles Tab Window Help
Sun 6 Oct 11:51:07
https://console.cloud.google.com/functions/details/us-central1/helloWorld?env=gen1&authuser=1&hl=ru&inv=1&invt=AbeA0Q&project=rising-waters-435707-t2
Google Cloud
My First Project
func
Search
Cloud Run functions
Function details
EDIT
DELETE
COPY
LEARN
helloWorld
Cloud Run function (1st gen)
Version
Version 1, deployed at Oct 6, 2024, 12:13:36 A...
METRICS
DETAILS
SOURCE
VARIABLES
TRIGGER
PERMISSIONS
LOGS
TESTING
Predefined
1 hour
6 hours
12 hours
1 day
2 days
4 days
7 days
14 days
30 days
Annotations (1)
Invocations/Second
No data is available for the selected time frame.
Oct 6, 2024, 12:03:12 PM
UTC+5:45
11:40 AM
11:50 AM
12:00 PM
12:10 PM
12:20 PM
12:30 PM
0 time series
Execution time
No data is available for the selected time frame.
0 time series
Memory utilization
No data is available for the selected time frame.
Instance count
No data is available for the selected time frame.
Now viewing project "My First Project" in organization "No organization"

Exercise 3:


Warp File Edit View Tab Blocks Window Help
Sun 6 Oct 11:36:51
..-dev/assignment2/task3
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2 (3.328s)
docker build -t hello-world-app .
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 190B
=> [internal] load metadata for docker.io/library/python:3.9-slim
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/5] FROM docker.io/library/python:3.9-slim@sha256:49f94609e5a997dc16086a66ac9664591854031d48e375945a9dbf4d1d53abbc
=> [internal] load build context
=> => transferring context: 63B
=> CACHED [2/5] WORKDIR /app
=> CACHED [3/5] COPY app.py .
=> CACHED [4/5] COPY requirements.txt .
=> CACHED [5/5] RUN pip install -r requirements.txt
=> exporting to image
=> => exporting layers
=> => writing image sha256:deb19ab04fe8c5f9687e38b1775a57e24ebb829069b2ce463a123dbac86d9575
=> => naming to docker.io/library/hello-world-app
View build details: docker-desktop://dashboard/build/desktop-linux/desktop-linux/wtrjy3gkwasboxdaypulxahui
What's next:
View a summary of image vulnerabilities and recommendations → docker scout quickview
What's Next?
View a summary of image vulnerabilities and recommendations → docker scout quickview
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2 (1m 9.48s)
docker run --rm hello-world-app
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:8080
* Running on http://172.17.0.2:8080
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 791-572-867
~/Desktop/kbtu/Fall2024/cloud-dev/assignment2/task3 git:(main)±2