Create project and set default

Create Directory

Install Flask

```
app – Блокнот
Файл  Правка  Формат  Вид  Справка
runtime: python39
handlers:
  - url: /.*
    script: auto
```

Create .yaml file

```
blinker==1.8.2
click==8.1.7
colorama==0.4.6
Flask==3.0.3
gunicorn==23.0.0
importlib_metadata==8.5.0
itsdangerous==2.2.0
Jinja2==3.1.4
MarkupSafe==2.1.5
packaging==24.1
Werkzeug==3.0.4
zipp==3.20.2
```

Create requirements.txt file

```
Please choose the region where you want your App Engine application located:

[1] asia-east1     (supports standard and flexible)
[2] asia-east2     (supports standard and flexible and search_api)
[3] asia-northeast1 (supports standard and flexible and search_api)
[4] asia-northeast2 (supports standard and flexible and search_api)
[5] asia-northeast3 (supports standard and flexible and search_api)
[6] asia-south1    (supports standard and flexible and search_api)
[7] asia-southeast1 (supports standard and flexible)
[8] asia-southeast2 (supports standard and flexible and search_api)
[9] australia-southeast1 (supports standard and flexible and search_api)
[10] europe-central2 (supports standard and flexible)
[11] europe-west    (supports standard and flexible and search_api)
[12] europe-west2   (supports standard and flexible and search_api)
[13] europe-west3   (supports standard and flexible and search_api)
[14] europe-west6   (supports standard and flexible and search_api)
[15] northamerica-northeast1 (supports standard and flexible and search_api)
[16] southamerica-east1 (supports standard and flexible and search_api)
[17] us-central    (supports standard and flexible and search_api)
[18] us-east1      (supports standard and flexible and search_api)
[19] us-east4      (supports standard and flexible and search_api)
[20] us-west1      (supports standard and flexible)
[21] us-west2      (supports standard and flexible and search_api)
[22] us-west3      (supports standard and flexible and search_api)
[23] us-west4      (supports standard and flexible and search_api)
[24] cancel
Please enter your numeric choice:  13
```

Choose region

```
C:\Users\aliha\AppData\Local\Google\Cloud SDK\hello-world-app>gcloud app deploy
Services to deploy:

descriptor:              [C:\Users\aliha\AppData\Local\Google\Cloud SDK\hello-world-app\app.yaml]
source:                  [C:\Users\aliha\AppData\Local\Google\Cloud SDK\hello-world-app]
target project:          [cloud-app-dev-222222]
target service:          [default]
target version:          [20241007t223421]
target url:              [https://cloud-app-dev-222222.el.r.appspot.com]
target service account:  [cloud-app-dev-222222@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.
```

Deploy files

https://cloud-app-dev-21.ey.r.appspot.com/

```
C:\Users\aliha\AppData\Local\Google\Cloud SDK>gcloud projects create cloud-app-dev-222
Create in progress for [https://cloudresourcemanager.googleapis.com/v1/projects/cloud-app-dev-222].
Waiting for [operations/cp.6061015136583270466] to finish...done.
Enabling service [cloudapis.googleapis.com] on project [cloud-app-dev-222]...
Operation "operations/acat.p2-531153297626-e27b2af9-815f-42c2-808c-e5d29b1dec63" finished successfully.

C:\Users\aliha\AppData\Local\Google\Cloud SDK>gcloud config set project cloud-app-dev-222
Updated property [core/project].
```

Create project and set default

Name	ID	Billing account ↑
cloud-app-dev-222	cloud-app-dev-222	My Billing Account
cloud-app-dev-21	cloud-app-dev-21	Billing is disabled
My First Project	civic-meridian-435815-u4	Billing is disabled
My First Project	i-woodland-435815-e8	Billing is disabled

Activate Billing account

Basics

Environment

Cloud Run function ▾ ❓

Function name *

helloWorldFunction ❓

Region *

europe-central2 (Warsaw) ▾ ❓

Trigger

Trigger type

HTTPS ▾

URL

https://europe-central2-cloud-app-dev-222.cloudfunctions.net/helloWorldFunction

⧉

Authentication ❓

🔘 Allow unauthenticated invocations
Check this if you are creating a public API or website.

⭕ Require authentication
Manage authorized users with Cloud IAM.

On Cloud Run functions press to "Create Function"
Then choose your options

Deploy function

https://europe-central2-cloud-app-dev-222.cloudfunctions.net/helloWorldFunction
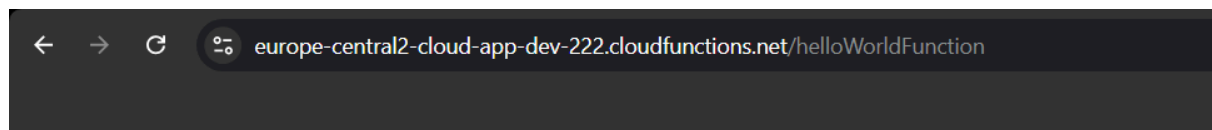
Hello, World!

```
Your current project has been set to: [cloud-app-dev-23].

Not setting default zone/region (this feature makes it easier to use
[gcloud compute] by setting an appropriate default value for the
--zone and --region flag).
See https://cloud.google.com/compute/docs/gcloud-compute section on how to set
default compute region and zone manually. If you would like [gcloud init] to be
able to do this for you the next time you run it, make sure the
Compute Engine API is enabled for your project on the
https://console.developers.google.com/apis page.

The Google Cloud CLI is configured and ready to use!

* Commands that require authentication will use alihanmurat11@gmail.com by default
* Commands will reference project `cloud-app-dev-23` by default
Run `gcloud help config` to learn how to change individual settings

This gcloud configuration is called [default]. You can create additional configurations if you work with multiple accounts and/or projects.
Run `gcloud topic configurations` to learn more.
```

Create project

app.py
```python
1    print("Hello from inside the container!")
2
```

Create app.py

Dockerfile – Блокнот

Файл Правка Формат Вид Справка

```dockerfile
# Use an official Python runtime as a parent image
FROM python:3.9-slim

# Set the working directory in the container
WORKDIR /app

# Copy the current directory contents into the container at /app
COPY . /app

# Run the application
CMD ["python", "app.py"]
```

Create Dockefile

```
C:\Users\aliha\AppData\Local\Google\Cloud SDK\app3>docker build -t hello-world-app .
[+] Building 10.3s (9/9) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 305B
 => [internal] load metadata for docker.io/library/python:3.9-slim
 => [auth] library/python:pull token for registry-1.docker.io
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [1/3] FROM docker.io/library/python:3.9-slim@sha256:49f94609e5a997dc16086a66ac9664591854031d48e375945a9dbf4d1d53abbc
 => => resolve docker.io/library/python:3.9-slim@sha256:49f94609e5a997dc16086a66ac9664591854031d48e375945a9dbf4d1d53abbc
 => => sha256:62a08b8dd4f53ad5493dabf2af00ccde91abb3771fb2187040bcf2fe94a7ced7 248B / 248B
 => => sha256:fdeeec85abbad3878f2008f9445f15a19a5a224d1b7e7715ac6b923072333e57 14.74MB / 14.74MB
 => => sha256:4c0965d3919510b506d8856ebc050a96e996c7dae96e4fb420882dbe7e037e67 3.51MB / 3.51MB
 => => sha256:302e3ee498053a7b5332ac79e8efebec16e900289fc1ecd1c754ce8fa047fcab 29.13MB / 29.13MB
 => => extracting sha256:302e3ee498053a7b5332ac79e8efebec16e900289fc1ecd1c754ce8fa047fcab
 => => extracting sha256:4c0965d3919510b506d8856ebc050a96e996c7dae96e4fb420882dbe7e037e67
 => => extracting sha256:fdeeec85abbad3878f2008f9445f15a19a5a224d1b7e7715ac6b923072333e57
 => => extracting sha256:62a08b8dd4f53ad5493dabf2af00ccde91abb3771fb2187040bcf2fe94a7ced7
 => [internal] load build context
 => => transferring context: 383B
 => [2/3] WORKDIR /app
 => [3/3] COPY . /app
 => exporting to image
 => => exporting layers
 => => exporting manifest sha256:9dc7ef543eb136921cbbe222fe965e6b59f00f5aa971ef57a9815f370cc70f78
 => => exporting config sha256:9d982b4a677cebc47ab7d6f3558c6d78f477dfaf6044faad026cd68c433cbc87
 => => exporting attestation manifest sha256:1d5349406e67e9bd6daa5e1fb70ca57645c640d3c6170d111b7d17310831183f
 => => exporting manifest list sha256:a11247f92743ca11db75cb383436712c87423dba7bdcd00267cb70bc58fc4727
 => => naming to docker.io/library/hello-world-app:latest
 => => unpacking to docker.io/library/hello-world-app:latest
```

run the code "docker build -t hello-world-app"

```
C:\Users\aliha\AppData\Local\Google\Cloud SDK\app3>docker run --rm hello-world-app
Hello from inside the container!
```

run the code "docker run --rm hello-world-app"