> > ***PROFESSIONAL DATA ENGINEER*** *- Google Cloud Platform*

TITLE: "Introduction to Google Cloud - Cloud Shell & Editor"

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Cloud Run Client - Python

Enable APIs

- Enable all necessary services:
    - gcloud services enable
      artifactregistry.googleapis.com
      cloudbuild.googleapis.com
      run.googleapis.com

To write an application in Python:

- Create a new directory named code and change directory into it
- Refer a file named main.py and refer the code into it
    - This code responds to requests with our "Hello World" greeting. HTTP handling is done by a Gunicorn web server in the container. When directly invoked for local use, this code creates a basic web server that listens on the port defined by the PORT environment variable.
- Refer the file requirements.txt and refer the following code into it
- Add a Dockerfile with the following contents
    - This starts a Gunicorn web server that listens on the port defined by the PORT environment variable.
- Add a .dockerignore file to exclude files from your container image.
- Deploy from source automatically builds a container image from source code and deploys it.

To deploy from source:

- In your source code directory, deploy from source using the following command:
    - gcloud run deploy
- If prompted to enable the API, Reply y to enable.
- When you are prompted for the source code location, press Enter to deploy the current folder.
- When you are prompted for the service name, press Enter to accept the default name, for example helloworld.
- If you are prompted to enable the Artifact Registry API or to allow creation of Artifact Registry repository, respond by pressing y.
- When you are prompted for region: select the region of your choice, for example us-central1.
- You will be prompted to allow unauthenticated invocations: respond y .Then wait a few moments until the deployment is complete. On success, the command line displays the service URL.
- Visit your deployed service by opening the service URL in a web browser.

- You have just deployed a container image from source code to Cloud Run. Cloud Run automatically and horizontally scales out your container image to handle the received requests, then scales in when demand decreases. You only pay for the CPU, memory, and networking consumed during request handling.