**Create Your first python App and Dockerise**



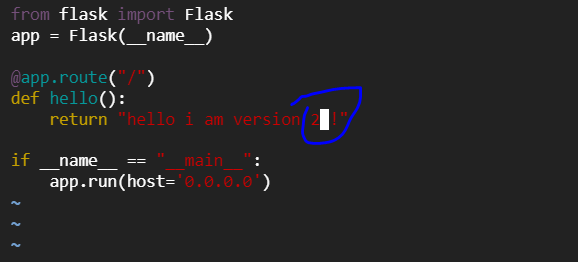
This page shows you how to do the following:

1. Create a Hello World app version 2 App.
2. Run it locally as service
3. Dockerise the application
4. Create python repo in Google container registry
5. Push python Version 2 image to GCR and Deploy the container image

**step 1 : review main.py ( this is your hello world python application)**

vim main.py

change “Hello from python” to Hello I am version 1 and then save file



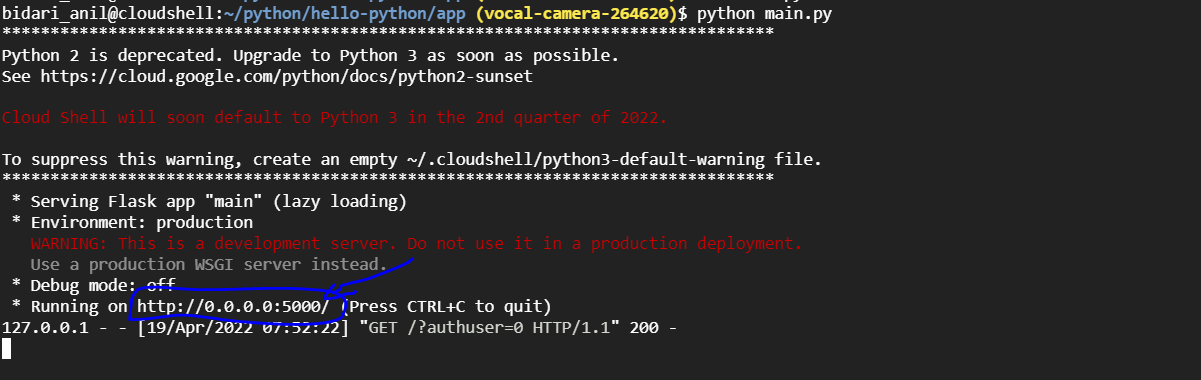
### **Step 5 Run app locally**

Manually run the installer and application using the following commands:

pip install -r requirements.txt

python main.py

**Step 6 : verify app is running your host:5000 by clicking on the url below**



On we browser tab – You will see your app running



### **Step 7 : Create a Dockerfile or You can existing**

Now that you have verified the source code works, the first step in containerizing the application is to create a Dockerfile.

In the hello-python/app directory, create a file named Dockerfile with the following contents and save it:

FROM python:3.7

RUN mkdir /app

WORKDIR /app

ADD . /app/

RUN pip install -r requirements.txt

EXPOSE 5000

CMD ["python", "/app/main.py"]

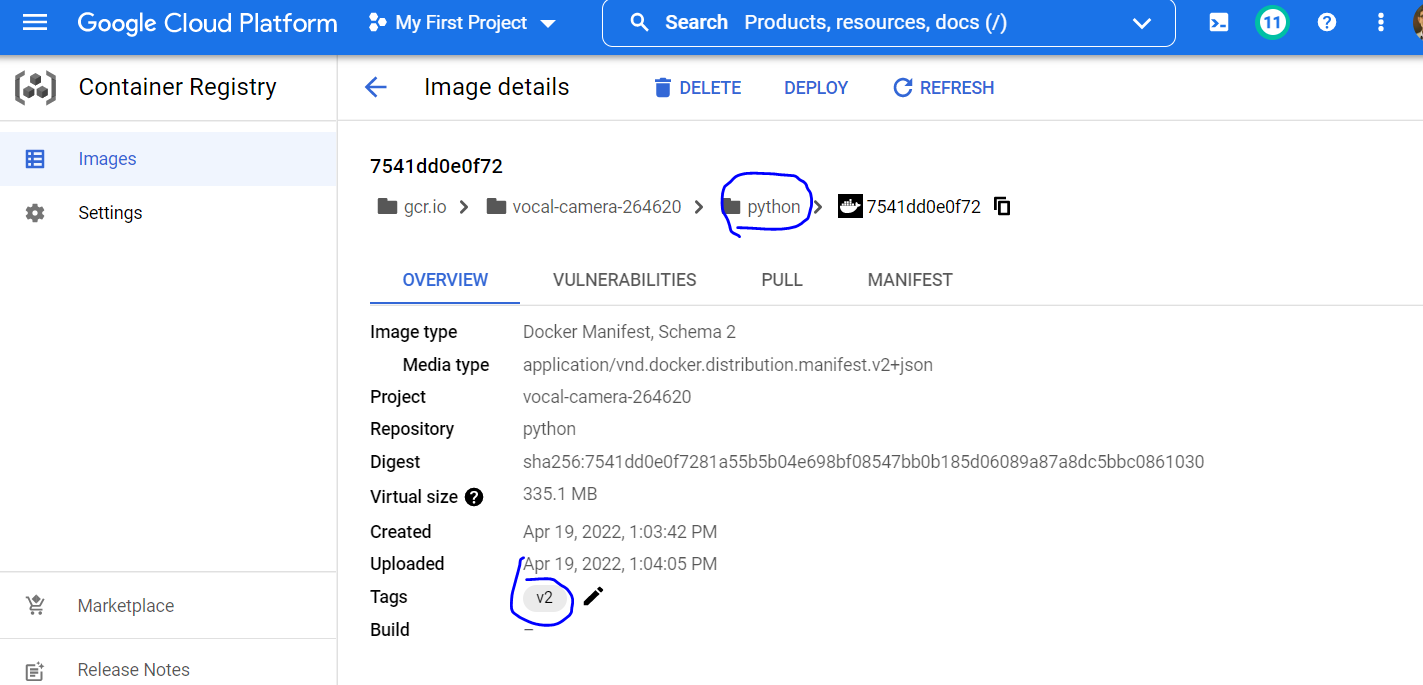
**Step 8 : build docker image v1**

docker build -t gcr.io/${PROJECT\_ID}/python:v2 .

**Step-11: Now we have to push the image. Run the below command.**

docker push gcr.io/${PROJECT\_ID}/python:v2

**Step-12: We can see that it is pushed.**



**Step-13 : deploy v1 app as container**

docker run -d --name c2 -p 6002:5000 gcr.io/${PROJECT\_ID}/python:v2

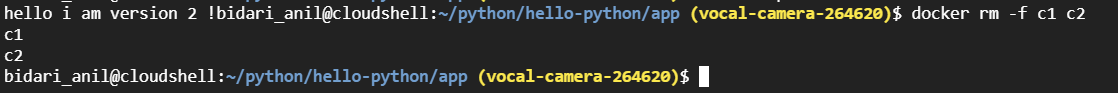
**step 14 : verify app1 is running**

curl http://localhost:6002



**step 15 : delete both containers**

docker rm -f c1 c2



**=================================== Completion of Lab ==================================**