**Prerequisites**

* Docker Engine
* Docker Compose

**Create project directory**

$mkdir project

$cd project

**Create file app.py**

app.py

import time

import redis

from flask import Flask

app = Flask(\_\_name\_\_)

cache = redis.Redis(host='redis', port=6379)

def get\_hit\_count():

retries = 5

while True:

try:

return cache.incr('hits')

except redis.exceptions.ConnectionError as exc:

if retries == 0:

raise exc

retries -= 1

time.sleep(0.5)

@app.route('/')

def hello():

count = get\_hit\_count()

return 'Hello World! I have been seen {} times.\n'.format(count)

requirements.txt

flask

redis

Dockerfile

FROM python:3.7-alpine

WORKDIR /code

ENV FLASK\_APP app.py

ENV FLASK\_RUN\_HOST 0.0.0.0

RUN apk add --no-cache gcc musl-dev linux-headers

COPY requirements.txt requirements.txt

RUN pip install -r requirements.txt

COPY . .

CMD ["flask", "run"]

docker-compose.yml

version: '3'

services:

web:

build: .

ports:

- "4000:4000"

redis:

image: "redis:alpine"

$docker-copose up -d