The Visitor-Counter

In this exercise we will create an application to count the visitors of a website. The application includes a Python FLASK service and a Redis cache. The scripts do not need to be developed but are provided.

Create a new directory **ex_visitor_counter** and move to this new directory. Create an empty **docker-compose.yml** file in it.

```
> mkdir ex_visitor_counter && cd ex_visitor_counter

> touch docker-compose.yml
```

1. Now create the **python script** *app.py* for our application.

```
> touch app.py
```

2. Insert the code from the linked file[1]:
3. Create another file called **requirements.txt** and insert the following:

```
> touch requirements.txt
```

```
flask

redis
```

4. Create a **Dockerfile** with a base image containing **python**. Also, define the following properties around Dockerfile:
   a. working directory with the name **code**
   b. the environment variable: **FLASK_APP** app.py
   c. the environment variable: **FLASK_RUN_HOST** 0.0.0.0
   d. installiere **gcc** mit dem Befehl: **apk add --no-cache gcc musl-dev linux-headers**
   e. Copy the file **requirements.txt** into the **working directory**
   f. Install the requirements with **pip install**
   g. **Copy** all data from your directory into your **Docker image**
   h. Execute the command: **flask run**

[1] https://github.com/HOFSA-EDU/BTS-Docker/blob/main/Docker%20compose/Visitor%20Counter/app.py

5. Create the docker image **myFlask** out of our dockerfile
6. Create the docker-compose file to start your Flask service and redis. Map the Flask-ports to 5000:5000.

   Hints**: For redis, use the image **redis:alpine

7. *Start your docker composition and see the result in the browser. Refresh the website! What do you see?*