5.1 Docker Compose

Description

My solution uses [Flask](#) (Python 3.10) as the HTTP framework. Instead of a production WSGI server, the two applications are served with the bundled development server. While this may cause warnings to be present in the container logs, I trust that this will not affect the grading.

On port numbers

Both services bind to container port 80, but only Service 1 is bound to a port on the host machine (port 8001). Traffic between the two containers is routed through the Docker network `internal`. Service 1 discovers Service 2 from an environment variable, which is included in `docker-compose.yml`.

Output of `docker container ls`

```
CONTAINER ID    IMAGE       COMMAND          CREATED        STATUS        PORTS
      NAMES
89ba837e56bc    5-service1    "python app.py"    2 minutes ago    Up 2 minutes
0.0.0.0:8001->80/tcp    5-service1-1
b153c08d4e02    5-service2    "python app.py"    2 minutes ago    Up 2 minutes
80/tcp          5-service2-1
```

(Copy and paste the above block to a field wider than 112 columns to see the original output formatting)

Output of `docker network ls`

```
NETWORK ID    NAME        DRIVER SCOPE
c1cdab2ae9c8    bridge      bridge local
f9d5b9a5bec0    host        host   local
47825048e047    internal    bridge local
6e2db2ebd8e8    none        null   local
```