<u>Screenshots</u>:


```
← → C  ⓘ http://localhost:5001

Hello from Foodly in Docker!
```
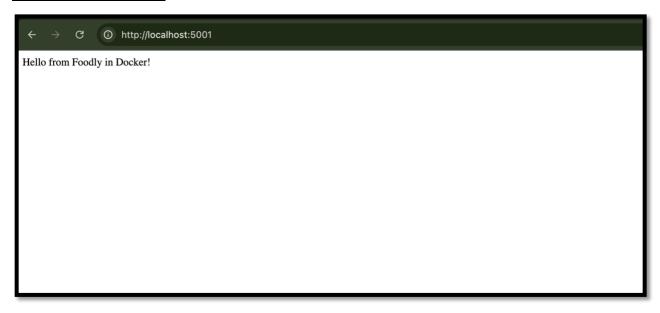


```
duha@Duhas-MacBook-Pro foodly-app % docker run -p 5001:5000 --name foodly-container-new \
  -v foodly_logs:/app/logs \
  foodly-web

* Serving Flask app 'app'
* Debug mode: off
```

```
[duha@Duhas-MacBook-Pro foodly-app % docker exec -it foodly-container-new sh
|# cat /app/logs/app.log
2025-09-28 20:12:45,224 INFO WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.17.0.2:5000
2025-09-28 20:12:45,224 INFO Press CTRL+C to quit
2025-09-28 20:13:25,616 INFO GET / from 172.17.0.1
2025-09-28 20:13:25,620 INFO 172.17.0.1 - - [28/Sep/2025 20:13:25] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:26,222 INFO GET / from 172.17.0.1
2025-09-28 20:13:26,223 INFO 172.17.0.1 - - [28/Sep/2025 20:13:26] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:26,691 INFO GET / from 172.17.0.1
2025-09-28 20:13:26,691 INFO 172.17.0.1 - - [28/Sep/2025 20:13:26] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:26,890 INFO GET / from 172.17.0.1
2025-09-28 20:13:26,890 INFO 172.17.0.1 - - [28/Sep/2025 20:13:26] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:27,123 INFO GET / from 172.17.0.1
2025-09-28 20:13:27,124 INFO 172.17.0.1 - - [28/Sep/2025 20:13:27] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:27,763 INFO GET / from 172.17.0.1
2025-09-28 20:13:27,763 INFO 172.17.0.1 - - [28/Sep/2025 20:13:27] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:27,973 INFO GET / from 172.17.0.1
2025-09-28 20:13:27,973 INFO 172.17.0.1 - - [28/Sep/2025 20:13:27] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:28,175 INFO GET / from 172.17.0.1
2025-09-28 20:13:28,175 INFO 172.17.0.1 - - [28/Sep/2025 20:13:28] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:28,376 INFO GET / from 172.17.0.1
2025-09-28 20:13:28,376 INFO 172.17.0.1 - - [28/Sep/2025 20:13:28] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:28,575 INFO GET / from 172.17.0.1
2025-09-28 20:13:28,576 INFO 172.17.0.1 - - [28/Sep/2025 20:13:28] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:28,774 INFO GET / from 172.17.0.1
2025-09-28 20:13:28,774 INFO 172.17.0.1 - - [28/Sep/2025 20:13:28] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:28,959 INFO GET / from 172.17.0.1
2025-09-28 20:13:28,959 INFO 172.17.0.1 - - [28/Sep/2025 20:13:28] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:29,157 INFO GET / from 172.17.0.1
2025-09-28 20:13:29,158 INFO 172.17.0.1 - - [28/Sep/2025 20:13:29] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:29,358 INFO GET / from 172.17.0.1
2025-09-28 20:13:29,359 INFO 172.17.0.1 - - [28/Sep/2025 20:13:29] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:29,541 INFO GET / from 172.17.0.1
2025-09-28 20:13:29,541 INFO 172.17.0.1 - - [28/Sep/2025 20:13:29] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:29,744 INFO GET / from 172.17.0.1
2025-09-28 20:13:29,745 INFO 172.17.0.1 - - [28/Sep/2025 20:13:29] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:29,942 INFO GET / from 172.17.0.1
2025-09-28 20:13:29,942 INFO 172.17.0.1 - - [28/Sep/2025 20:13:29] "GET / HTTP/1.1" 200 -
2025-09-28 20:13:30,146 INFO GET / from 172.17.0.1
2025-09-28 20:13:30,147 INFO 172.17.0.1 - - [28/Sep/2025 20:13:30] "GET / HTTP/1.1" 200 -
2025-09-28 20:18:18,097 INFO WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.17.0.2:5000
2025-09-28 20:18:18,098 INFO Press CTRL+C to quit
#
```

```
duha@Duhas-MacBook-Pro foodly-app % docker stop foodly-container
docker rm foodly-container

foodly-container
foodly-container
[duha@Duhas-MacBook-Pro foodly-app % docker rm foodly-container
Error response from daemon: No such container: foodly-container
```

```
foodly-container
duha@Duhas-MacBook-Pro foodly-app % docker run -p 5001:5000 --name foodly-container \
  -v foodly_logs:/app/logs \
[  foodly-web
 * Serving Flask app 'app'
 * Debug mode: off
^C%
duha@Duhas-MacBook-Pro foodly-app % docker stop foodly-container
docker rm foodly-container

foodly-container
foodly-container
[duha@Duhas-MacBook-Pro foodly-app % docker rm foodly-container
Error response from daemon: No such container: foodly-container
```

```
[duha@Duhas-MacBook-Pro foodly-app % docker-compose up -d
[+] Running 2/2
 ✔ Container foodly-app-db-1   Running
 ✔ Container foodly-app-web-1  Running
[duha@Duhas-MacBook-Pro foodly-app % docker-compose ps
NAME                IMAGE            COMMAND               SERVICE   CREATED        STATUS        PORTS
foodly-app-db-1     postgres:14      "docker-entrypoint.s…"  db        8 minutes ago  Up 8 minutes  5432/tcp
foodly-app-web-1    foodly-app-web   "python app.py"       web       3 minutes ago  Up 3 minutes  0.0.0.0:5001->5000/tcp
duha@Duhas-MacBook-Pro foodly-app %
```

Q: What's the difference between a container and an image?

- Image = a ready-to-run template (static, non-changing)
- Container = a live, running instance of the image that can be modified and executed

Q: Why do we use a named volume instead of writing directly inside the container?

- Because files inside a container are deleted when the container is removed, whereas a volume stores data persistently, independent of the container

Q: In a Dockerfile, what does WORKDIR do?

- It sets the working directory inside the container; all subsequent commands (COPY, RUN, CMD) are executed in this directory

Q: docker-compose down -v vs docker-compose down

- Without -v = removes only the containers; volumes remain intact
- With -v = removes containers **and** the associated volumes