

docker-assignment

Friday, 13 February 2026 8:50 AM

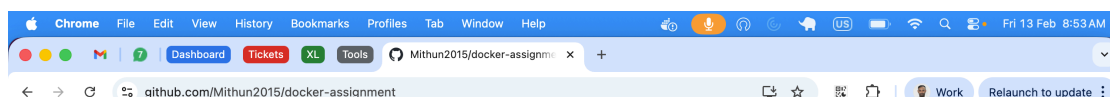
Application & GitHub Setup

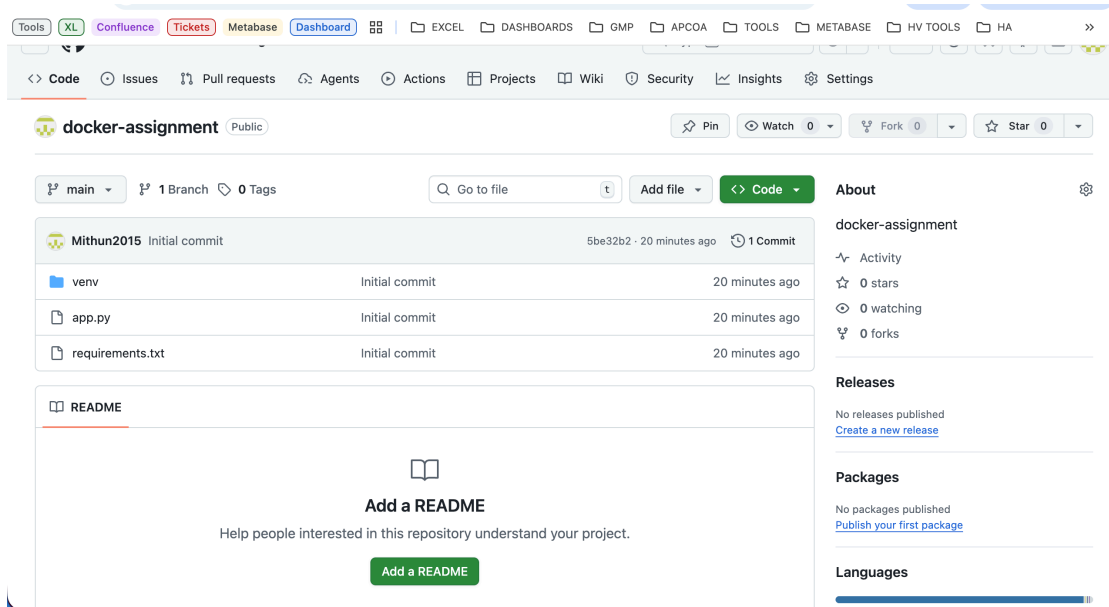
```
[(venv) admin@MacBook-Pro-5:~/docker-assignment$ pwd  
/Users/admin/Desktop/HERO_VIRED/docker-assignment  
(venv) admin@MacBook-Pro-5:~/docker-assignment$
```

```
[(venv) admin@MacBook-Pro-5:~/docker-assignment$ ls  
app.py          Dockerfile      requirements.txt  venv  
(venv) admin@MacBook-Pro-5:~/docker-assignment$
```

```
app.py          Dockerfile      requirements.txt  
[(venv) admin@MacBook-Pro-5:~/docker-assignment$ cat app.py  
from flask import Flask  
  
app = Flask(__name__)  
  
@app.route("/")  
def home():  
    return "Hello from Docker."  
  
if __name__ == "__main__":  
    app.run(host="0.0.0.0", port=5000)  
  
(venv) admin@MacBook-Pro-5:~/docker-assignment$
```

```
[(venv) admin@MacBook-Pro-5:~/docker-assignment$ cat requirements.txt  
Flask==3.1.2  
(venv) admin@MacBook-Pro-5:~/docker-assignment$
```





Dockerfile & Image Build

```
FLASK=3.1.2
[(venv) admin@MacBook-Pro-5:docker-assignment admin$ cat Dockerfile
# Base image
FROM python:3.9-slim

# Set working directory
WORKDIR /app

# Copy requirements first (for caching)
COPY requirements.txt .

# Install dependencies
RUN pip install --no-cache-dir -r requirements.txt

# Copy application code
COPY app.py .

# Expose application port
EXPOSE 5000

# Start the application
CMD ["python", "app.py"]

(venv) admin@MacBook-Pro-5:docker-assignment admin$
```

Docker Build

```
(venv) admin@MacBook-Pro-5:docker-assignment admin$ docker build -t flask-docker-app .
```

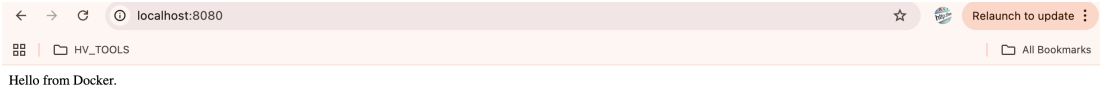
Check Docker images after build

```
(venv) admin@MacBook-Pro-5:docker-assignment admin$ docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
flask-docker-app     latest      2d327eef9963  8 minutes ago  226MB
```

Check container and docker status

```
(venv) admin@MacBook-Pro-5:docker-assignment admin$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                    NAMES
244426a51256   flask-docker-app "python app.py"         8 minutes ago Up 8 minutes   0.0.0.0:8080->5000/tcp, :::8080->5000/tcp   sad_hertz

(venv) admin@MacBook-Pro-5:docker-assignment admin$
```



Docker Compose

```
[(venv) admin$ cat docker-compose.yml
version: "3.9"

services:
  flask-app:
    build: .
    container_name: flask-compose-app
    ports:
      - "8081:5000"

(venv) admin$
```

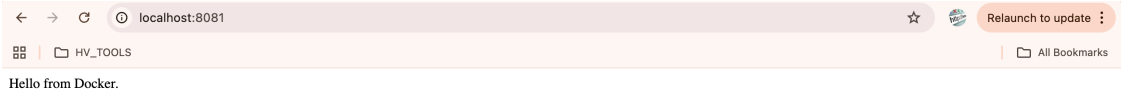
Compose up (detached mode)

```
(venv) admin$ docker-compose up -d
WARN[0000] /Users/admin/Desktop/HERO_VIRED/docker-assignment/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Building 3.0s (12/12) FINISHED
=> [internal] load local bake definitions 0.0s
=> => reading from stdin 583B 0.0s
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 380B 0.0s
=> [internal] load metadata for docker.io/library/python:3.9-slim 2.3s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 65B 0.0s
=> [1/5] FROM docker.io/library/python:3.9-slimsha256:2d97f6910b16bd338d3860f261f53f144965f755599aablacdale13cf1731b1b 0.0s
=> => resolve docker.io/library/python:3.9-slimsha256:2d97f6910b16bd338d3860f261f53f144965f755599aablacdale13cf1731b1b 0.0s
=> CACHED [2/5] WORKDIR /app 0.0s
=> CACHED [3/5] COPY requirements.txt . 0.0s
=> CACHED [4/5] RUN pip install --no-cache-dir -r requirements.txt 0.0s
=> CACHED [5/5] COPY app.py . 0.0s
=> => exporting layers 0.1s
=> => exporting manifest sha256:5dd3152b52fba9963e116f979f4f60ceb1df5b455f3be18e7d2c4914495d418 0.0s
=> => exporting config sha256:e9c81648b36bb2fc582bfe5b67ehd132c2b77cce746abddad1d82e86d5e5b5b5 0.0s
=> => exporting attestation manifest sha256:6c3f1fea34801019ded209ed963f050f92c615a328836897cfcd2e84ec6f3f9 0.0s
=> => exporting manifest list sha256:4f283631597c6646afdd9b08c4b3366a1755b0f796e3a6fa945f0630f06b74e0a 0.0s
=> => naming to docker.io/library/docker-assignment-flask-app:latest 0.0s
=> => unpacking to docker.io/library/docker-assignment-flask-app:latest 0.0s
=> => resolving provenance for metadata file 0.0s
[+] Running 3/3
✔ docker-assignment-flask-app Built 0.0s
✔ Network docker-assignment_default Created 0.1s
✔ Container flask-compose-app Started 0.4s
(venv) admin$
```

Check the running container and docker names .

```
(venv) admin$ docker-compose ps
WARN[0000] /Users/admin/Desktop/HERO_VIRED/docker-assignment/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
NAME                IMAGE                                COMMAND                  SERVICE    CREATED        STATUS        PORTS
flask-compose-app    docker-assignment-flask-app         'python app.py'         flask-app  22 seconds ago Up 22 seconds 0.0.0.0:8081->5000/tcp, [::]:8081->5000/tcp
You have new mail in /var/mail/admin
(venv) admin$
```

Access the application on web browser



Check Docker Logs

```
(venv) admin@MacBook-Pro-5:docker-assignment admin$ docker-compose logs
WARN[0000] /Users/admin/Desktop/HERO_VIRED/docker-assignment/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
flask-compose-app | * Serving Flask app 'app'
flask-compose-app | * Debug mode: off
flask-compose-app | WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
flask-compose-app | * Running on all addresses (0.0.0.0)
flask-compose-app | * Running on http://127.0.0.1:5000
flask-compose-app | * Running on http://172.18.0.2:5000
flask-compose-app | Press CTRL+C to quit
flask-compose-app | 192.168.65.1 - - [13/Feb/2026 03:31:18] "GET / HTTP/1.1" 200 -
flask-compose-app | 192.168.65.1 - - [13/Feb/2026 03:31:18] "GET /favicon.ico HTTP/1.1" 404 -
(venv) admin@MacBook-Pro-5:docker-assignment admin$
```

Down Docker

```
flask-compose-app | 192.168.65.1 - - [13/Feb/2026 03:31:18] "GET /favicon.ico HTTP/1.1" 404 -
(venv) admin@MacBook-Pro-5:docker-assignment admin$ docker-compose down
WARN[0000] /Users/admin/Desktop/HERO_VIRED/docker-assignment/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 2/2
  ✓ Container flask-compose-app      Removed          1.3s
  ✓ Network docker-assignment_default Removed          0.2s
(venv) admin@MacBook-Pro-5:docker-assignment admin$
```