

# Homework #3 Proof that it works (Late)

Here I show how I set up the docker image for the **hw3large**:

```
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ ls
Dockerfile.large Dockerfile.small hw2 screenshots.pdf
from flask import Flask # WSGI (Web Server Gateway Interface)
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ ls
Dockerfile.large Dockerfile.small hw2 screenshots.pdf
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker build -f Dockerfile.large -t nmetens/hw3large .
[*] Building 4.1s (11/11) FINISHED
=> [internal] load build definition from Dockerfile.large
=> => transferring Dockerfile: 486B
=> [internal] load metadata for docker.io/library/ubuntu:20.04
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 1.60KB
=> [1/6] FROM docker.io/library/ubuntu:20.04sha256:8e5c4f0285ecbb4ead070431d29b576a530d3166df73ec44affc1cd27555141b
=> CACHED [2/6] RUN apt-get update -y
=> CACHED [3/6] RUN apt-get install -y python3-pip curl
=> CACHED [4/6] WORKDIR /app
=> [5/6] COPY ./hw2 /app
=> [6/6] RUN pip install --r requirements.txt
=> exporting to image
=> => exporting layers
=> => writing image sha256:032a7cc1c4ed78a4ffdb0367f5d7795a7e7a3a5c3d9b4825da43be612a949f
=> => naming to docker.io/nmetens/hw3large
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
nmetens/hw3large latest 032a7cc1c4ed 7 seconds ago 312B
<none> <none> 6effd0d3c8cb 5 minutes ago 458MB
<none> <none> b1bb6942a1dc 14 minutes ago 458MB
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
4cafbec05d0 6effd0d3c8cb "python3 app.py" 2 minutes ago Exited (0) About a minute ago serene_kepler

metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker run -it -p 8000:8000 nmetens/hw3large
* Serving Flask app 'app'
* Debug mode: on
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://127.0.0.1:8000
* Running on http://172.17.0.2:8000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 772-906-157
172.17.0.1 - - [13/Nov/2024 04:30:27] "GET / HTTP/1.1" 200 -
```

Next, I opened a new terminal and performed curl and wget:

```
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ ls
Dockerfile.large Dockerfile.small file_for_curl file_for_wget hw2 index.html screenshots.pdf
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ wget http://localhost:8000
--2024-11-13 04:36:11-- http://localhost:8000/
Resolving localhost (localhost)... 127.0.0.1, ::1
Connecting to localhost (localhost)|127.0.0.1|:8000... connected.
HTTP request sent, awaiting response... 200 OK
Length: 659 [text/html]
Saving to: 'index.html.1'

index.html.1 100%[=====] 659 --.-KB/s in 0s

2024-11-13 04:36:11 (65.5 MB/s) - 'index.html.1' saved [659/659]

metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ curl http://localhost:8000
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Song Submission Form</title>
  <link rel="stylesheet" type="text/css" href="/static/styles.css">
</head>
<body>
  <div>
    <h1>Songs in the database</h1>
    <!-- Redirect to the sign.html page: -->
    <a href="/sign"><h3>Enter a new song</h3></a>
    <!-- Redirect to the update.html page: -->
    <a href="/update"><h3>Remove a song</h3></a>
    <!-- For every song in the songs database (passed in by the
    songs dictionary list in index.py), display all the song
    information: -->
    <h2>Songs:</h2>
  </div>
</body>
</html>metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$
```

Both of the outputs are saved in files **'file\_for\_curl'** and **'file\_for\_wget'** respectively. You can view both with a `cat file_for_<curl or wget>`.

Here is the setup for the **hw3small**:

```
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ ls
Dockerfile.large Dockerfile.small file_for_curl file_for_wget hw2 index.html index.html.1 screenshots.pdf
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker build -f Dockerfile.small -t nmetens/hw3small .
[+] Building 10.4s (10/10) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile.small          0.0s
=> <=> transferring Dockerfile: 601B                               0.0s
=> [internal] load metadata for docker.io/library/python:3.9-alpine 1.0s
=> [internal] load .dockerignore                                    0.0s
=> <=> transferring context: 2B                                       0.0s
=> [1/5] FROM docker.io/library/python:3.9-alpine@sha256:6cd1638bcf81f36231cb93573eeb2a2e57f8be07ed75719f1f947edebe37b272 2.0s
=> <=> resolve docker.io/library/python:3.9-alpine@sha256:6cd1638bcf81f36231cb93573eeb2a2e57f8be07ed75719f1f947edebe37b272 0.0s
=> <=> sha256:6cd1638bcf81f36231cb93573eeb2a2e57f8be07ed75719f1f947edebe37b272 0.0s
=> <=> sha256:da9db072f522755cbeb85be2b3f84059b70571b229512f1571d9217b77e1087f 3.62MB / 3.62MB 0.2s
=> <=> sha256:4090be5bcb3f9053773458cb5fef02dff0cb3f5f092fed32818d7a392012db6a 455.13kB / 455.13kB 0.3s
=> <=> sha256:93d062e4f522982fda0080f4aeaca2796bf86c09263efce129c05a922c66d38 17.18MB / 17.18MB 0.5s
=> <=> sha256:6cd1638bcf81f36231cb93573eeb2a2e57f8be07ed75719f1f947edebe37b272 10.29kB / 10.29kB 0.0s
=> <=> sha256:7da1691db094f2f88aa079cc42399be26c88423f561c790a00463beade447d2 1.73kB / 1.73kB 0.0s
=> <=> extracting sha256:da9db072f522755cbeb85be2b3f84059b70571b229512f1571d9217b77e1087f 0.1s
=> <=> sha256:bc9636b15de8e2e81d3aff7c9dc854ef5beebcb9cfc317b85193aa10267df55 249B / 249B 0.4s
=> <=> extracting sha256:4090be5bcb3f9053773458cb5fef02dff0cb3f5f092fed32818d7a392012db6a 0.1s
=> <=> extracting sha256:93d062e4f522982fda0080f4aeaca2796bf86c09263efce129c05a922c66d38 1.1s
=> <=> extracting sha256:bc9636b15de8e2e81d3aff7c9dc854ef5beebcb9cfc317b85193aa10267df55 0.0s
=> [internal] load build context                                   0.0s
=> <=> transferring context: 881B                                       0.0s
=> [2/5] WORKDIR /app                                             0.3s
=> [3/5] COPY hw2/requirements.txt .                               0.0s
=> [4/5] RUN apk add --no-cache curl && pip install --no-cache-dir -r requirements.txt 6.7s
=> [5/5] COPY /hw2 /app                                           0.0s
=> <=> exporting to image                                              0.3s
=> <=> exporting layers                                              0.2s
=> <=> writing image sha256:ff1028ae3dc7e5fd24d16e6e4e3cbbfe782949a8127afe1dcc92106c99d8021 0.0s
=> <=> naming to docker.io/nmetens/hw3small                          0.0s
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
nmetens/hw3small    latest         ff1028ae3dc7   5 seconds ago   70.1MB
nmetens/hw3large    latest         032a7cc0c4ed   18 minutes ago  458MB
<none>              <none>         6effd0d3c8cb   23 minutes ago  458MB
<none>              <none>         b1bb6942a2dc   33 minutes ago  458MB
metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker ps -a
CONTAINER ID        IMAGE             COMMAND                  CREATED            STATUS              PORTS              NAMES
04633f47f4f7       nmetens/hw3large "python3 app.py"        19 minutes ago    Exited (0) 7 minutes ago                  determined_swanson
4ca3becd05d0       6effd0d3c8cb    "python3 app.py"        22 minutes ago    Exited (0) 20 minutes ago                  serene_kepler

metens@cloudshell:~/CS530/cloud-metens-metens/hw3 (cloud-metens)$ docker run -it -p 8000:8000 nmetens/hw3small
* Serving Flask app 'app'
* Debug mode: on
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://127.0.0.1:8000
* Running on http://172.17.0.2:8000
Press CTRL-C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 100-361-083
172.17.0.1 - - [13/Nov/2024 04:53:14] "GET / HTTP/1.1" 200 -
□
```

The curl and wget are the same.