

Docker image: chomtana/printname

- Docker build

```
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$ docker build . -t printname
[+] Building 9.9s (9/9) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 266B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/python:3.6
=> [1/4] FROM docker.io/library/python:3.6@sha256:1c12b04b37f41ea6393b1064bdd2901b5bb9624cb8d8128af88f2417a22998ad
=> [internal] load build context
=> => transferring context: 491B
=> CACHED [2/4] WORKDIR /usr/src/app
=> [3/4] RUN pip3 install flask
=> [4/4] COPY .
=> exporting to image
=> => exporting layers
=> => writing image sha256:a45a2740fbc020bc5152f87425d0c9f0a8342a6c230398b6ee8ab66abf6581
=> => naming to docker.io/library/printname
```

- Docker run and Docker commit

```
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$ docker run -d printname
ad3cef4654911aa7c5d0ead5ded8f612b156e0eb46df2cb28d7b62d0871ce199
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$ docker container ls
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
ad3cef465491   printname     "python3 -m flask ru..." 8 seconds ago  Up 7 seconds  33060/tcp, 0.0.0.0:3307->3306/tcp  charming_dewdney
41910960caa2   mysql:latest  "docker-entrypoint.s..." 4 months ago  Up 17 minutes  33060/tcp, 0.0.0.0:3307->3306/tcp  letx-backend_mysql_db_1
6b09ea8a258    docker_backend-fakebook  "docker-entrypoint.s..." 16 months ago  Up 1 second   0.0.0.0:5510->8000/tcp          docker_backend-fakebook_1

MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$ docker commit ad3cef465491 printname2
sha256:8ae03b09cc989bb1c00b97f15ee681076070442ee9d66b0aa04757e174815a25
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$ docker image ls
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
printname2    latest   8ae03b09cc98  3 seconds ago  913MB
printname     latest   2ab2cb36fb43  39 seconds ago  913MB
<none>        <none>   1a56c16a2e51  About a minute ago  913MB
<none>        <none>   a45a2740fbc0  2 minutes ago  913MB
<none>        <none>   23a3aa54eef4  4 minutes ago  902MB
<none>        <none>   c6d8719d73e0  13 minutes ago  902MB
gartuumodel   latest   7fd3f14e88a   4 months ago  772MB
nginx         latest   62d49f9bab67  5 months ago  133MB
letx-backend_api latest   e96aef9a5f14  5 months ago  712MB
<none>        <none>   5afa3da84e32  7 months ago  335MB
<none>        <none>   5180ef2c3adf  7 months ago  88.9MB
nikolaik/python-nodejs python3.8-nodejs12-alpine e51727c98527 7 months ago  335MB
node          12-alpine 0206ff8a5f9e 8 months ago  88.9MB
node          14-alpine 471e8b4eb0b2 8 months ago  116MB
docker_frontend-fakebook latest   1342e3bb3500 16 months ago  334MB
<none>        <none>   fcc2cb7b8ab3 16 months ago  334MB
docker_backend-fakebook latest   710ea09fd545 16 months ago  138MB
<none>        <none>   d8bf2dd4d7e6 16 months ago  120MB
<none>        <none>   6b21617604c6 16 months ago  120MB
<none>        <none>   22ff410afa1f 16 months ago  120MB
<none>        <none>   cfc7e24ca18e 16 months ago  119MB
soncomqiq/backend-test latest   7655ad789208 16 months ago  119MB
<none>        <none>   44f0eb4acc05 16 months ago  138MB
soncomqiq/backend-fakebook 1        64160446732e 16 months ago  138MB
mysql         latest   30f937e841c8 16 months ago  541MB
node          alpine   72eea7c426fc 16 months ago  117MB
busybox       latest   78096d0a5478 16 months ago  1.22MB
burin010n/kaldi latest   b7c630284570 17 months ago  12.4GB
hello-world   latest   bf756fb1ae65 20 months ago  13.3kB
daniyel3/kaldi-webtrc latest   96c8160ddc45 2 years ago  1.05GB
dtjones/speech-recognition latest   ba95a2428d98 5 years ago  4.56GB
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreez$
```

- Uploading docker image to hub

```

MacBook-Pro-3:py3spark-docker-boilerplate buzzfreeze$ docker image tag printname chomtana/printname
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreeze$ docker image ls
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
printname2          latest      8ae03b09cc98     4 minutes ago   913MB
printname           latest      2ab2cb36fb43     5 minutes ago   913MB
chomtana/printname   latest      2ab2cb36fb43     5 minutes ago   913MB
<none>              <none>     1a56c16a2e51     5 minutes ago   913MB
<none>              <none>     a45a2740fbc9     7 minutes ago   913MB
<none>              <none>     23a3aa54eef4     9 minutes ago   902MB
<none>              <none>     c6d8719d73e0     18 minutes ago  902MB
gartuumodel         latest      7f1d3f14e88a     4 months ago    772MB
nginx               latest      62d49f9bab67     5 months ago    133MB
letx-backend_api    latest      e96aef9a5f14     5 months ago    712MB
<none>              <none>     5afa3da84e32     7 months ago    335MB
<none>              <none>     5180ef2c3adf     7 months ago    88.9MB
nikolaik/python-nodejs python3.8-nodejs12-alpine e51727c98527     7 months ago    335MB
node                12-alpine  0206ff8a5f9e     8 months ago    88.9MB
node                14-alpine  471e8b4eb0b2     8 months ago    116MB
docker_frontend-fakebook latest      1342e3bb3500     16 months ago   334MB
<none>              <none>     fcc2cb7b8ab3     16 months ago   334MB
docker_backend-fakebook latest      710ea09fd545     16 months ago   138MB
<none>              <none>     d8bf2dd4d7e6     16 months ago   120MB
<none>              <none>     6b21617604c6     16 months ago   120MB
<none>              <none>     22ff410afa1f     16 months ago   120MB
<none>              <none>     cfc7e24ca18e     16 months ago   119MB
soncomqiq/backend-test latest      7655ad789208     16 months ago   119MB
<none>              <none>     44f0eb4acc05     16 months ago   138MB
soncomqiq/backend-fakebook 1          64160446732e     16 months ago   138MB
mysql               latest      30f937e841c8     16 months ago   541MB
node                alpine     72eea7c426fc     16 months ago   117MB
busybox             latest      78096d0a5478     16 months ago   1.22MB
burin010n/kaldi     latest      bfc630204570     17 months ago   12.4GB
hello-world         latest      bf756fb1ae65     20 months ago   13.3kB
danijel3/kaldi-webrtc latest      96c8160ddc45     2 years ago     1.05GB
dtjones/speech-recognition latest      ba95a2428d98     5 years ago     4.56GB

```

```

MacBook-Pro-3:py3spark-docker-boilerplate buzzfreeze$ docker push chomtana/printname
Using default tag: latest
The push refers to repository [docker.io/chomtana/printname]
6a051fe5f871: Pushed
b6f58322b590: Pushed
37409b9375a8: Pushed
1eb4d0818e24: Mounted from library/python
0d901395d91a: Mounted from library/python
0921f67224d7: Mounted from library/python
b648c7c7c062: Mounted from library/python
7cf0f434f498: Mounted from library/python
8555e663f65b: Pushed
d00da3cd7763: Mounted from library/python
4e61e63529c2: Mounted from library/python
799760671c38: Mounted from library/python
latest: digest: sha256:e48e95e1f3de75673ca11c11fc354a753cd15cf0c2fc86af9fe1a78190967984 size: 2844

```

แสดงให้เห็นถึง layer ที่เพิ่มขึ้นมา โดยดูจากผลลัพธ์ของคำสั่ง docker diff หรือ docker build พร้อมคำอธิบาย

```
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```

```
MacBook-Pro-3:py3spark-docker-boilerplate buzzfreeze$ docker diff ad3cef465491
C /usr
C /usr/src
C /usr/src/app
A /usr/src/app/__pycache__
A /usr/src/app/__pycache__/app.cpython-36.pyc
C /usr/local
C /usr/local/lib
C /usr/local/lib/python3.6
C /usr/local/lib/python3.6/http
C /usr/local/lib/python3.6/http/__pycache__
A /usr/local/lib/python3.6/http/__pycache__/server.cpython-36.pyc
C /usr/local/lib/python3.6/site-packages
C /usr/local/lib/python3.6/site-packages/pkg_resources
C /usr/local/lib/python3.6/site-packages/pkg_resources/__pycache__
A /usr/local/lib/python3.6/site-packages/pkg_resources/__pycache__/__init__.cpython-36.pyc
C /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor
C /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging
C /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/markers.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/requirements.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/specifiers.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/utils.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/version.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/__about__.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/compat.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/structures.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/__init__.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/packaging/__pycache__/typing.cpython-36.pyc
C /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/__pycache__
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/__pycache__/__init__.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/__pycache__/appdirs.cpython-36.pyc
A /usr/local/lib/python3.6/site-packages/pkg_resources/_vendor/__pycache__/pyparsing.cpython-36.pyc
C /usr/local/lib/python3.6/site-packages/pkg_resources/extern
C /usr/local/lib/python3.6/site-packages/pkg_resources/extern/__pycache__
A /usr/local/lib/python3.6/site-packages/pkg_resources/extern/__pycache__/__init__.cpython-36.pyc
C /usr/local/lib/python3.6/__pycache__
A /usr/local/lib/python3.6/__pycache__/difflib.cpython-36.pyc
A /usr/local/lib/python3.6/__pycache__/secrets.cpython-36.pyc
A /usr/local/lib/python3.6/__pycache__/runpy.cpython-36.pyc
```

Image layers:

- Python: /usr/local/lib/python3.6
- Base layer: Ubuntu

Container layers:

- Writable
- Application: /usr/src/app
- Python: /usr/local/lib/python3.6
- Base layer: Ubuntu

Container has new Application (/usr/src/app) and Writable layers