

به نام خدا

گزارش پروژه درس رایانش ابری

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گام دوم

(۱)

```
root@user:/home/user/CloudComputing/CC-Project/step_2# docker build -t surl .
Sending build context to Docker daemon 7.168kB
Step 1/5 : FROM alpine
---> c059bfaa849c
Step 2/5 : RUN apk update
---> Using cache
---> af725946bcf8
Step 3/5 : RUN apk add curl && apk add python3 && apk add py3-pip && pip3 in
stall requests && pip3 install pyyaml && pip3 install redis && pip3 install p
yshorteners
---> Using cache
---> b575072a1bd5
Step 4/5 : COPY . .
---> 779d0d552c67
Step 5/5 : CMD python3 main.py
---> Running in 922fda978461
Removing intermediate container 922fda978461
---> bff0ab1c6af9
Successfully built bff0ab1c6af9
Successfully tagged surl:latest
root@user:/home/user/CloudComputing/CC-Project/step_2#
```

(2)

```

user@user:~/CloudComputing/CC-Project/step_3/step_2$ docker build -t smahdimir/surl:latest .
Sending build context to Docker daemon 10.24kB
Step 1/5 : FROM alpine
--> c059bfaa849c
Step 2/5 : RUN apk update
--> Using cache
--> af725946bcf8
Step 3/5 : RUN apk add curl && apk add python3 && apk add py3-pip && pip3 install requests && pip3 install pyyaml && pip3 install redis && pip3 install pyshorteners
--> Using cache
--> b575072a1bd5
Step 4/5 : COPY . .
--> c0d76e448169
Step 5/5 : CMD python3 main.py
--> Running in 3a36347a9038
Removing intermediate container 3a36347a9038
--> 33c8768792ea
Successfully built 33c8768792ea
Successfully tagged smahdimir/surl:latest
user@user:~/CloudComputing/CC-Project/step_3/step_2$ docker push smahdimir/surl:latest
The push refers to repository [docker.io/smahdimir/surl]
b12c2af098f1: Pushed
80c3f84b52f8: Layer already exists
e0e7718d52aa: Layer already exists
8d3ac3489996: Layer already exists
latest: digest: sha256:19cfd07e39676b1c20434d9bb6371df4b034230be40731d6465da42896174af6 size: 1159
user@user:~/CloudComputing/CC-Project/step_3/step_2$

```

(3)

The screenshot shows the VS Code interface with the following components:

- Top Bar:** Tabs for 'main.py step_1 M', 'main.py (Working Tree) M', 'config.yml U', 'Dockerfile U X', 'redis.conf U', and 'main.py step_2 U'.
- Editor:** Displays the 'Dockerfile' with the following content:


```

1 FROM alpine
2 RUN apk update
3 RUN apk add curl && apk add python3 && apk add py3-pip && pip3 install requests && pip3 install pyyaml && pip3 install redis && pip3 install pyshorteners
4 COPY . .
5 CMD python3 main.py
6 # docker build -t surl .
7
8 # docker pull redis
9 # docker run --name redis -d -p 6379:6379 redis redis-server --requirepass "123"

```
- Terminal:** Shows the execution of the Docker build and push commands, followed by a curl command to test the service:


```

root@user:/home/user/CloudComputing/CC-Project# curl 172.17.0.3:1111/y6dpgc7
curl: (52) Empty reply from server
root@user:/home/user/CloudComputing/CC-Project# curl --request POST 172.17.0.3:1111 -d url=google.com
Requested shorted url: this_server_ip:1111/y6dpgc7root@user:/home/user/CloudComputing/CC-Project# curl --request P
172.17.0.3:1111/y6dpgc7^C
root@user:/home/user/CloudComputing/CC-Project# curl 172.17.0.3:1111/y6dpgc7
{
  "/y6dpgc7": "google.com"
}
*****
root@user:/home/user/CloudComputing/CC-Project#

```
- Output Panel:** Displays the Docker build logs, including the successful build and push of the 'surl' image, and the Docker run command output showing the service is running on port 1111.

(4)

```

FROM alpine
RUN apk update
RUN apk add curl && apk add python3 && apk add py3-pip && pip3 install requests
&& pip3 install pyyaml && pip3 install redis && pip3 install pyshorteners
COPY . .
CMD python3 main.py

```

بررسی منابع

برای جلوگیری از ناسازگاری داده‌ها از یک پاد ردیس استفاده شده است. در صورت استفاده از چندین یاد مشکلات متعددی در درج و خواندن پیش خواهد آمد.

تست سیستم)

[illegible]

بعد از گذشت زمان انقضا:

```
/ # curl web-service/api/aa2239
{
  "/api/aa2239": "Not Found ==> first post it !"
}
/ # █
```

پست و درخواست ادرس نامعتبر)

```
/ # curl --request POST web-service/api -d url=http://goo
{
  "http://goo": "1d39cf"
}
/ # curl web-service/api/1d39cf
{
  "/api/1d39cf": "url is not valid"
}
/ # █
```