

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

OS DOCKERS 10 Mark COMPONENT

SUBMITTED BY

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As part of the Course **Operating System-CS51**

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Steps

- Create a Dockerfile and save it in the “website” folder of Desktop
- Commands for Dockerfile are as follows:
 1. FROM httpd
 2. COPY ./usr/local/apache2/htdocs/
- Commands in terminal of ubuntu:
 1. sudo su
 2. su root
 3. cd Desktop
 4. cd website
 5. snap install docker
 6. docker build -t website
- Execution results of above steps:
 1. Copying files from httpd/library (download+extraction)
 2. From htdocs
- docker images
- docker run -itd -p 81:81 --name website website
- docker ps
- Go to firefox then to the docker site. Then go to repositories and again back to terminal
- docker login
 1. Username:
 2. Password:
- docker tag website username/website:latest
- docker images
- docker login
- docker push username/website:latest
- Go to firefox and reload the page. Go to the repository and check your added repository. Click on your repository.



- We can see that our container is created
- If we click on public view, we can see there written our respective “username/foier_name”
- For Docker pull commands:
 1. Open the terminal
 2. cd
 3. sudo su
 4. su root
 5. docker pull username/folder_name
 6. docker images
 7. docker ps
 8. docker run -d -p 8181:81 username/folder_name
 9. docker ps
- Go to the firefox browser and type localhost:8181
- Our project is displayed in the form of a website

Building the docker file

```
root@nirbhay-VirtualBox: /home/nirbhay/Desktop/website
nirbhay@nirbhay-VirtualBox:~$ sudo su
[sudo] password for nirbhay:
root@nirbhay-VirtualBox: /home/nirbhay/Desktop/website# cd Desktop/website/
root@nirbhay-VirtualBox: /home/nirbhay/Desktop/website# cd ..
root@nirbhay-VirtualBox: /home/nirbhay/Desktop# docker build -t website .
unable to prepare context: unable to evaluate symlinks in Dockerfile path: lstat /home/nirbhay/Desktop/Dockerfile: no such file or directory
root@nirbhay-VirtualBox: /home/nirbhay/Desktop# cd website/
root@nirbhay-VirtualBox: /home/nirbhay/Desktop/website# docker build -t website .
Sending build context to Docker daemon  5.02MB
Step 1/2 : FROM httpd
--> 157dcdf23d6c
Step 2/2 : COPY . /user/local/apache2/htdocs/
--> Using cache
--> 575d27c68d40
Successfully built 575d27c68d40
Successfully tagged website:latest
root@nirbhay-VirtualBox: /home/nirbhay/Desktop/website#
```



Pushing the docker file

```
Login Succeeded
root@nirbhay-VirtualBox:/home/nirbhay/Desktop/website# docker push 1ms20cs075/website:latest
The push refers to repository [docker.io/1ms20cs075/website]
3934ab339f6c: Pushed
df40ccf15557: Mounted from library/httpd
10d8cd84bc49: Mounted from library/httpd
8bb2d8abcb18: Mounted from library/httpd
2bccf7e3b941: Mounted from library/httpd
b5ebffba54d3: Mounted from library/httpd
latest: digest: sha256:002f3c84338d69b9e957e2642e5b66a7f1617d8f16fe0dbde7023c1068f3e7a5 size: 1577
root@nirbhay-VirtualBox:/home/nirbhay/Desktop/website#
```

Pulling the docker file

```
nirbhay@nirbhay-VirtualBox:~$ sudo su
[sudo] password for nirbhay:
root@nirbhay-VirtualBox:/home/nirbhay# docker pull 1ms20cs075/website
Using default tag: latest
latest: Pulling from 1ms20cs075/website
Digest: sha256:002f3c84338d69b9e957e2642e5b66a7f1617d8f16fe0dbde7023c1068f3e7a5
Status: Image is up to date for 1ms20cs075/website:latest
docker.io/1ms20cs075/website:latest
root@nirbhay-VirtualBox:/home/nirbhay# docker images


| REPOSITORY         | TAG    | IMAGE ID     | CREATED        | SIZE  |
|--------------------|--------|--------------|----------------|-------|
| 1ms20cs075/website | latest | 575d27c68d40 | 34 minutes ago | 150MB |
| website            | latest | 575d27c68d40 | 34 minutes ago | 150MB |
| httpd              | latest | 157dcdf23d6c | 8 days ago     | 145MB |


```