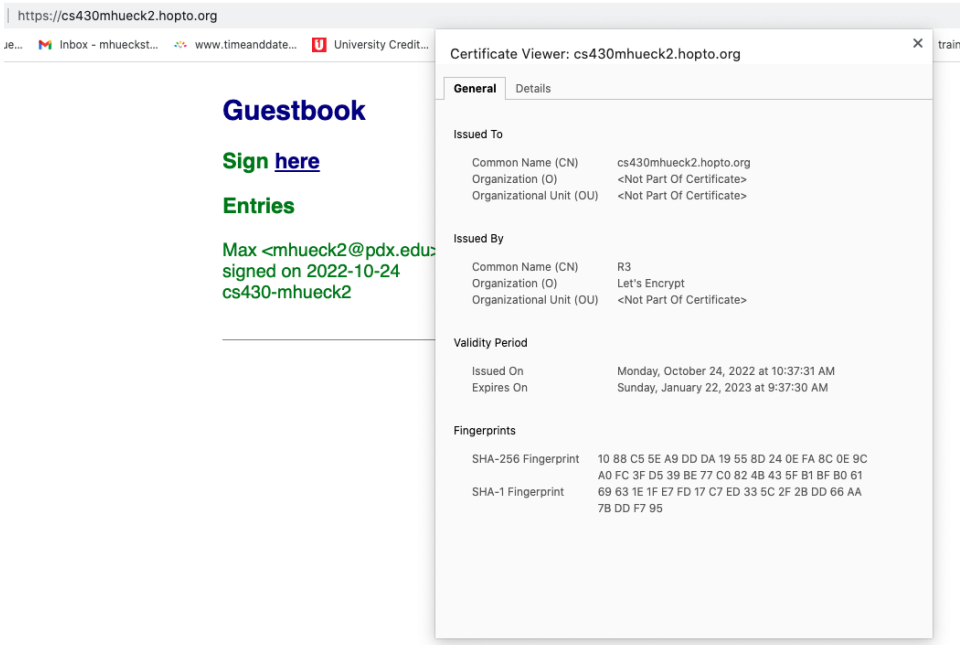
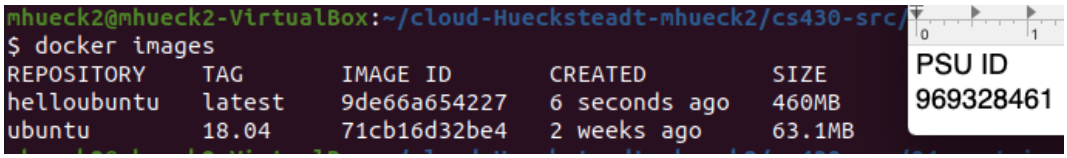
CS 530
Lab 4
Max Hueckstead

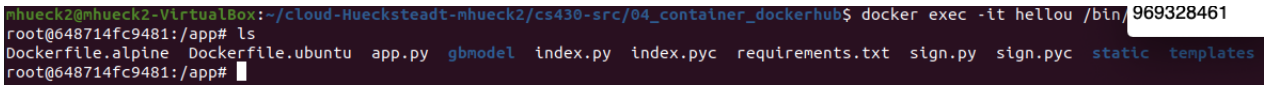
1. Guestbook sign at new DNS with certificate



2. Docker images:



Directory in docker container:



Version of linux standard base being used:

```
root@648714fc9481:/# cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=18.04
DISTRIB_CODENAME=bionic
DISTRIB_DESCRIPTION="Ubuntu 18.04.6 LTS"
root@648714fc9481:/#
```

PSU ID
969328461

All processes in container:

```
root@648714fc9481:/# ps -ef
UID          PID    PPID  C STIME TTY          TIME CMD
root           1       0  0 21:22 ?        00:00:00 python app.py
root           8       1  0 21:22 ?        00:00:02 /usr/bin/python /app/app.py
root          11       0  0 21:23 pts/0    00:00:00 /bin/bash
root          26      11  0 21:30 pts/0    00:00:00 ps -ef
root@648714fc9481:/#
```

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Output of dockerhub pull:

```
mhueck2@mhueck2-VirtualBox:~/cloud-Huecksteadt-mhueck2/cs430-src/04_container_dockerhub$ do
cker run -di -p 8000:5000 --name hellou mhueck2/helloubuntu
Unable to find image 'mhueck2/helloubuntu:latest' locally
latest: Pulling from mhueck2/helloubuntu
e706e0a9f423: Already exists
7b6aa2bac306: Pull complete
73e233f7f152: Pull complete
e8d178677ad0: Pull complete
59a18afbe6a3: Pull complete
Digest: sha256:48dd3a0b01c01ddb5b33181f60965752282ee9b1a5378fafccdb898c96247b05
Status: Downloaded newer image for mhueck2/helloubuntu:latest
353a9df9c487c7a4533b3144263f80d26090a597680337eafd1cf3dec70b3630
```

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Dockerhub container:

3. Docker alpine image, about 3 times smaller than the ubuntu image

```
mhueck2@mhueck2-VirtualBox:~/cloud-Huecksteadt-mhueck2/cs430-src/04_
cker images
REPOSITORY    TAG       IMAGE ID       CREATED         SIZE
helloalpine   latest    1a49ecb8318f   4 seconds ago   59.6MB
python        alpine    880fc229346e   10 days ago     48.7MB
ubuntu        18.04     71cb16d32be4   2 weeks ago     63.1MB
```

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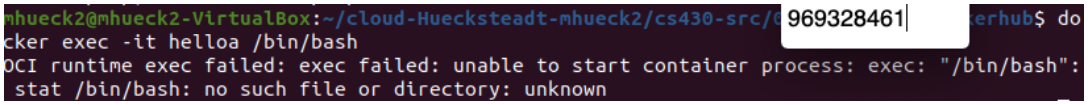
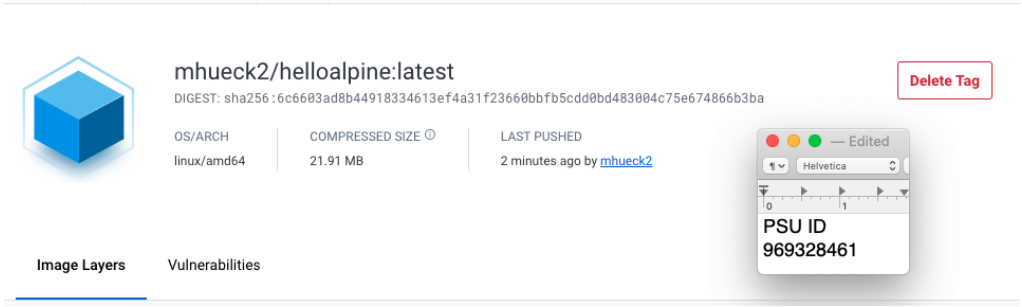
Output of trying to open a bash shell in the alpine docker image:



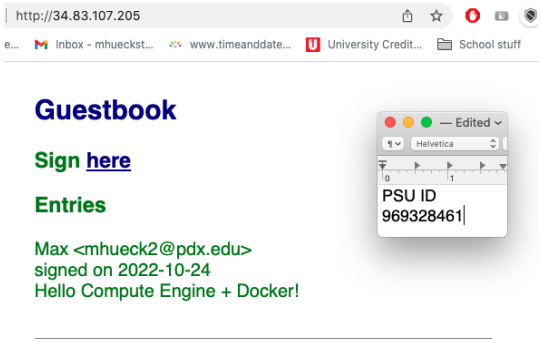
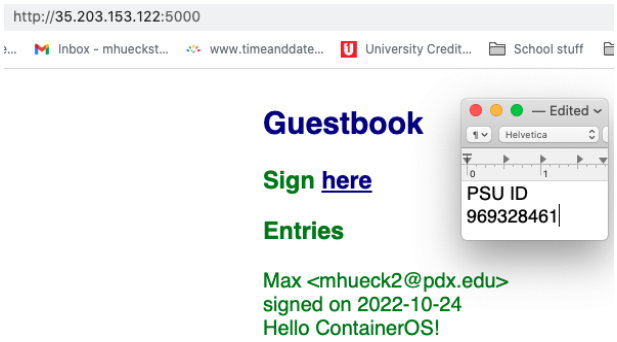
Because alpine linux is stripped down, it doesn't include bash as an 'extra' utility.

Screenshot of alpine linux release and processes:

Dockerhub image of helloalpine:



4. Docker image from compute engine VM IP address:



Docker image from ComputeOS