04.1g: nginx Compute Engine Guestbook

Install the application

Take a screenshot of the site along with its Let's Encrypt certificate and include it in your lab notebook.
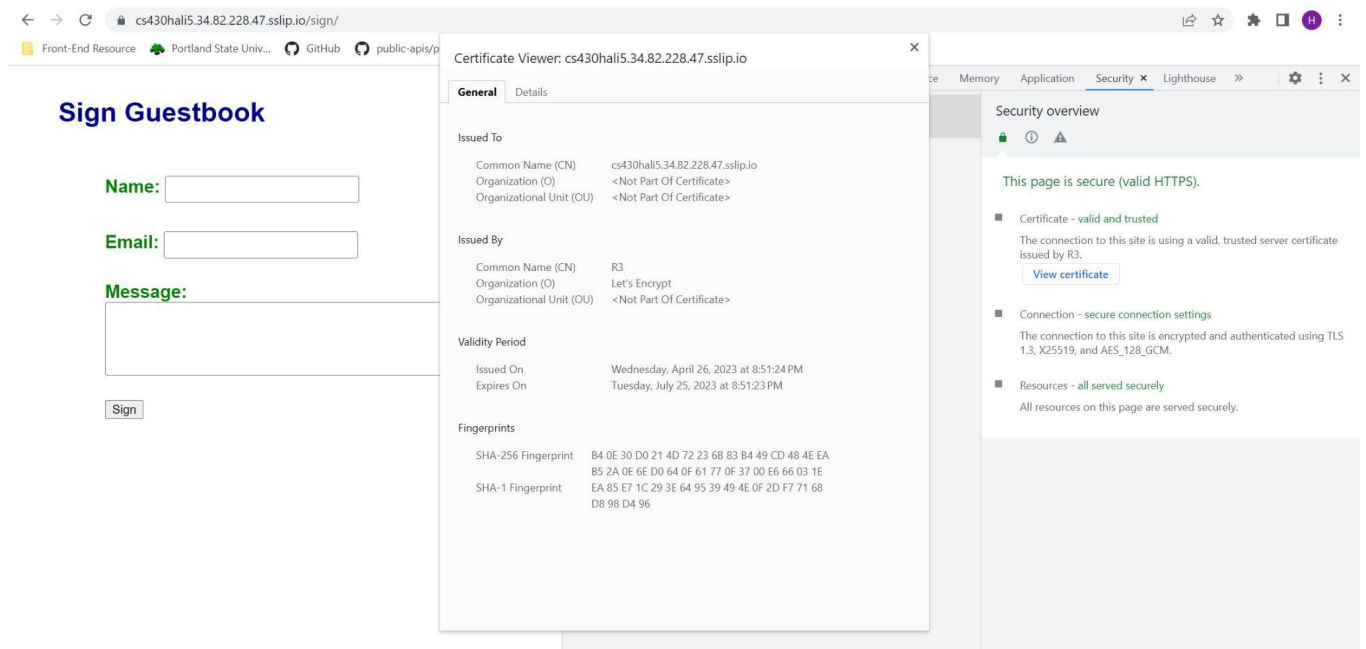
04.2g. Docker Guestbook

Build and run the Ubuntu-based container

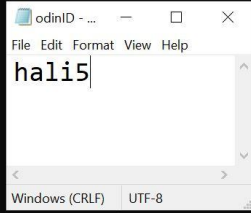**Take a screenshot of the results for your lab notebook**

```
Successfully built 92e24ac85020
Successfully tagged helloubuntu:latest
htran@DESKTOP-01BI236:~/cs430-src/04_container_dockerhub$ docker images
REPOSITORY      TAG        IMAGE ID        CREATED         SIZE
helloubuntu     latest     92e24ac85020    2 minutes ago   441MB
ubuntu          20.04      88bd68917189    2 weeks ago     72.8MB
htran@DESKTOP-01BI236:~/cs430-src/04_container_dockerhub$
```
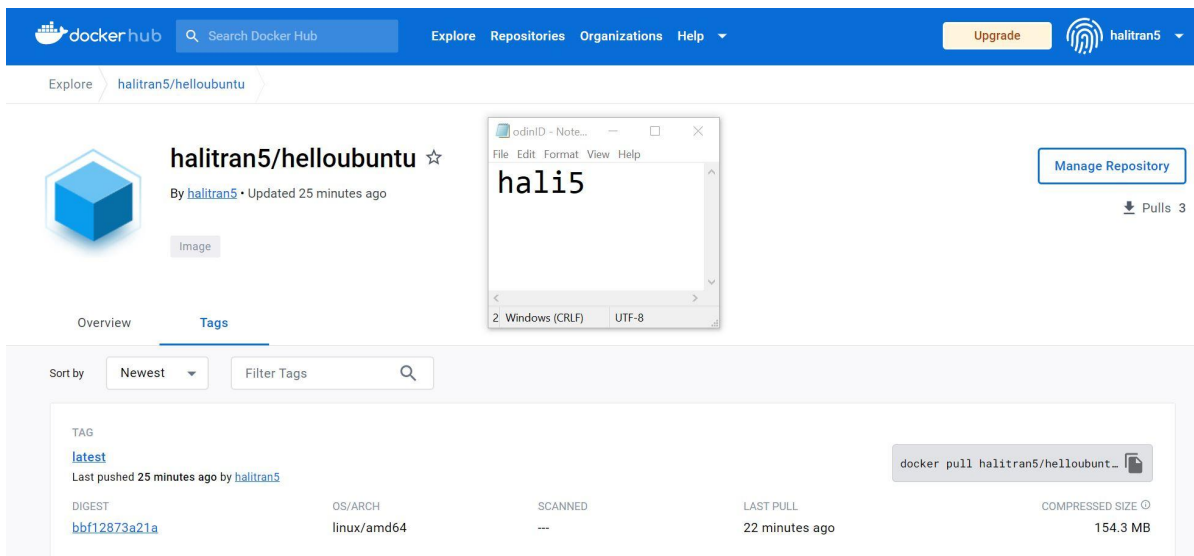
odinI... — ☐ ✕
File Edit Format View Help
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Running from Docker Hub

Run the image directly from Docker Hub and show a screenshot of the output of the command in your lab notebook

```
htran@DESKTOP-01BI236:~/cs430-src/04_container_dockerhub$ docker run -di -p 8000:5000 --name hellou halitran5/helloubuntu
Unable to find image 'halitran5/helloubuntu:latest' locally
latest: Pulling from halitran5/helloubuntu
ca1778b69356: Already exists
a01c32151f7b: Pull complete
51787bfd9bcc: Pull complete
f7414d5887fe: Pull complete
73db6228d1c3: Pull complete
Digest: sha256:bbf12873a21ab716a9e60cb27a05c9bca2c8191d20c5fb8416a6aef2857f53dd
Status: Downloaded newer image for halitran5/helloubuntu:latest
77c72e7a35a83410b847dd90e4f2cd1010756e9ce052d5a93d755bd9747b962f
htran@DESKTOP-01BI236:~/cs430-src/04_container_dockerhub$
```

odinID - ... — ☐ ✕
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hali5

Windows (CRLF)   UTF-8

Take a screenshot of the container image and its size for your lab notebook.

docker hub   🔍 Search Docker Hub   Explore Repositories Organizations Help ▼   Upgrade   halitran5 ▼

Explore > halitran5/helloubuntu

halitran5/helloubuntu ☆

By halitran5 · Updated 25 minutes ago

Image

odinID - Note... — ☐ ✕
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2 Windows (CRLF)   UTF-8

Manage Repository

⬇ Pulls 3

Overview   **Tags**

Sort by   Newest ▼   Filter Tags   🔍

TAG				
latest				docker pull halitran5/helloubunt... 📋
Last pushed 25 minutes ago by halitran5				
DIGEST	OS/ARCH	SCANNED	LAST PULL	COMPRESSED SIZE ⓘ
bbf12873a21a	linux/amd64	---	22 minutes ago	154.3 MB

Build and run the Alpine-based container

Take a screenshot of the image generated and its size for your lab notebook. How much smaller is the image than the Ubuntu one?

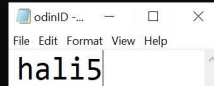The alpine image was much smaller than the Ubuntu image with a size difference of 374MB.

Show the output of this command in a screenshot for your lab notebook. What might have happened?
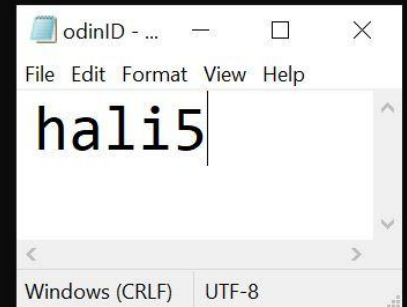
The base image is Alpine, which is much smaller in size than Ubunutu since it removes many non-essential components, one of those being the bash shell since it is a much more advanced shell program as compared to sh. Therefore, the command to get an interactive shell failed because the bash binary is not present in an Alpine distribution.
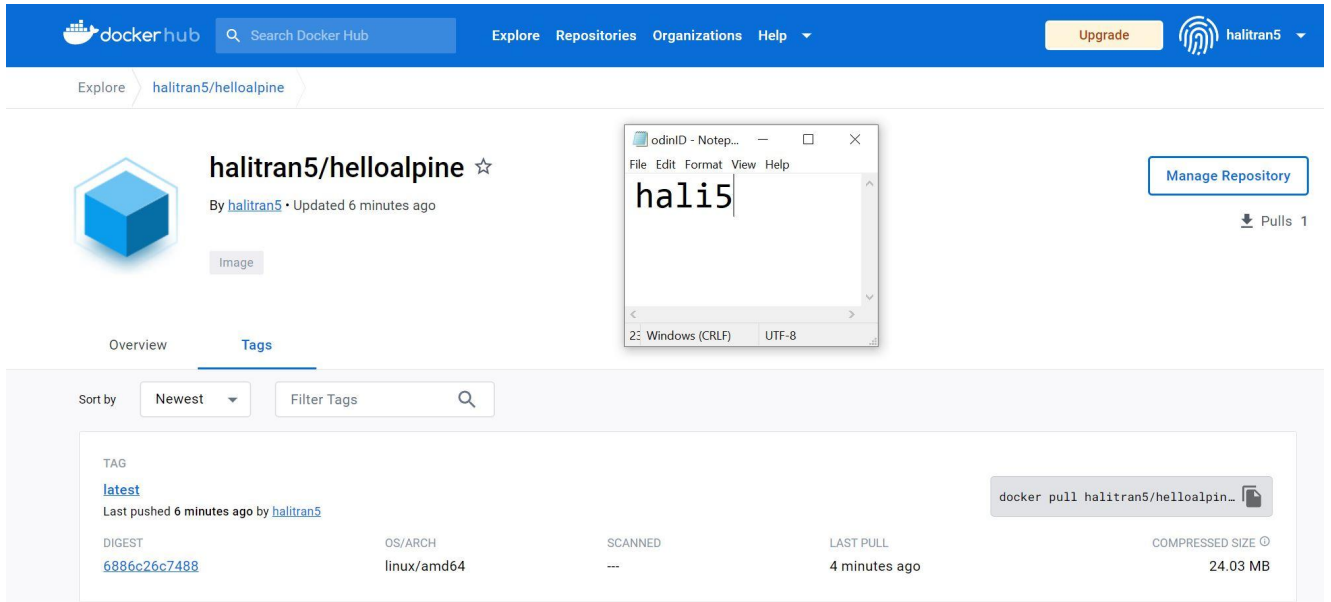
Take a screenshot of the output of each

Docker Hub Alpine

Take a screenshot of the container image and its size.

Compute Engine Ubuntu VM deployment

Take a screenshot of the entry that includes the VM's external IP address for your lab notebook.

Compute Engine ContainerOS VM deployment

Take a screenshot of the entry that includes the VM's external IP address for your lab notebook.