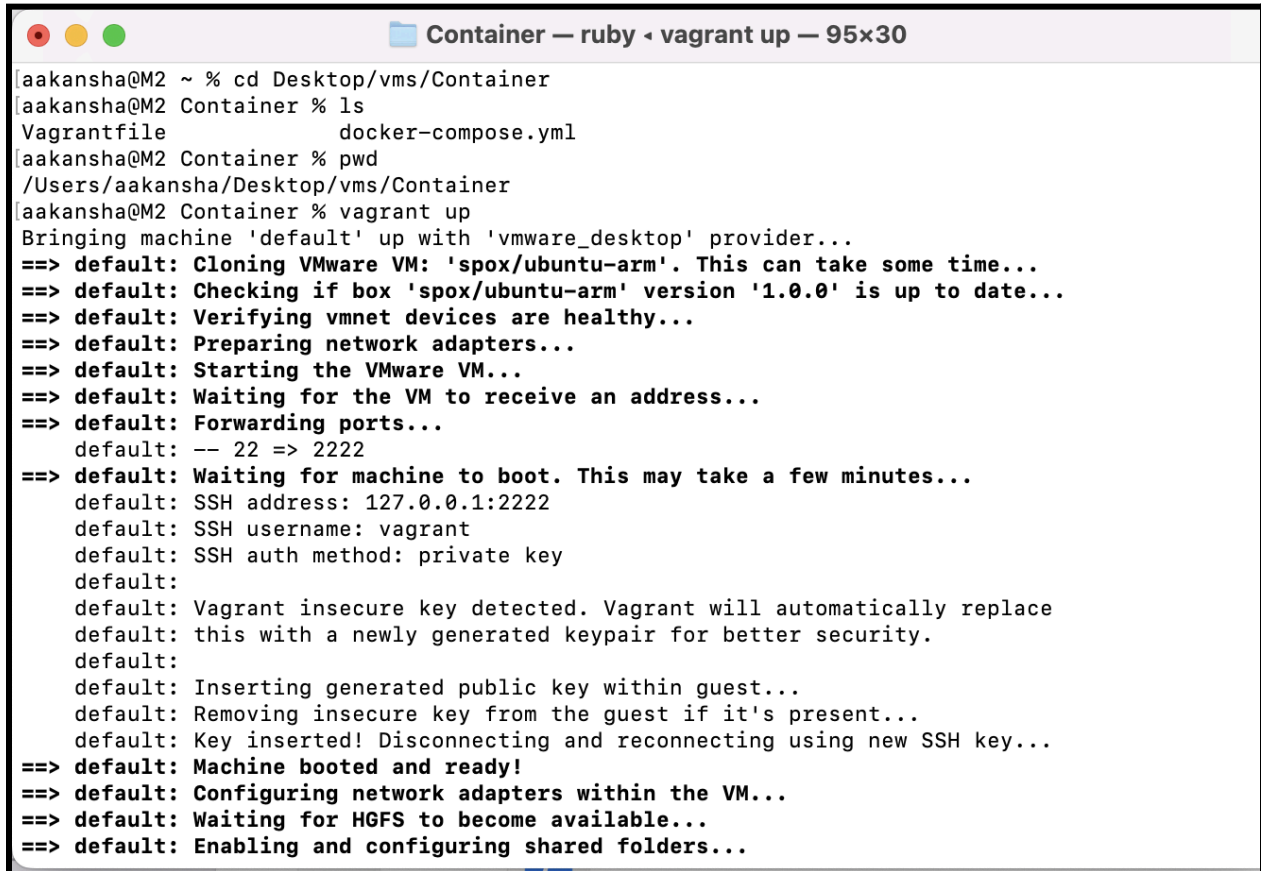


Microservice Project

Make a folder. Keep the Vagrant file in it.

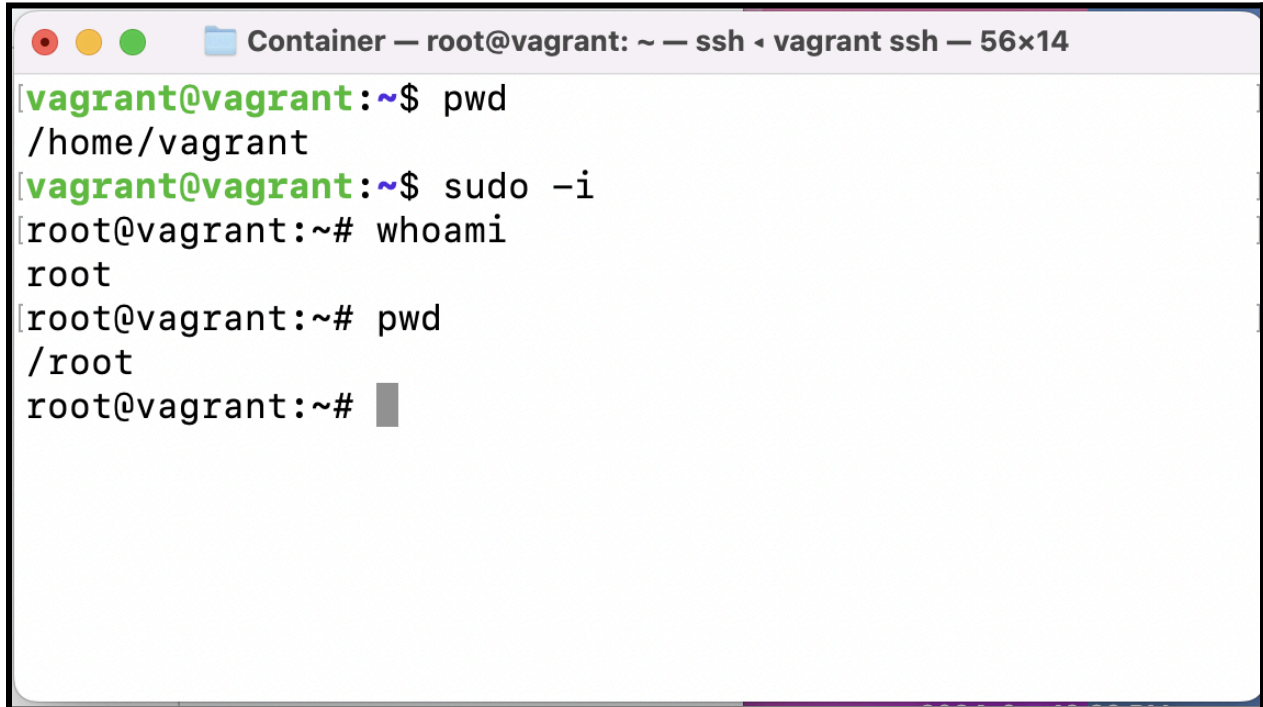
Bring up the VM using vagrant up.

A terminal window titled "Container — ruby ◀ vagrant up — 95x30" showing a series of commands and their outputs. The user 'aakansha' is at a machine 'M2' and navigates to a directory 'Desktop/vms/Container'. They list files, showing 'Vagrantfile' and 'docker-compose.yml'. Then they run 'vagrant up', which triggers a series of Vagrant actions: bringing up the machine, cloning the VM, checking box version, verifying network, starting the VM, waiting for an address, forwarding ports, waiting for boot, and finally booting the machine and configuring network and shared folders. The terminal output is as follows:

```
aakansha@M2 ~ % cd Desktop/vms/Container
aakansha@M2 Container % ls
Vagrantfile          docker-compose.yml
aakansha@M2 Container % pwd
/Users/aakansha/Desktop/vms/Container
aakansha@M2 Container % vagrant up
Bringing machine 'default' up with 'vmware_desktop' provider...
==> default: Cloning VMware VM: 'spox/ubuntu-arm'. This can take some time...
==> default: Checking if box 'spox/ubuntu-arm' version '1.0.0' is up to date...
==> default: Verifying vmnet devices are healthy...
==> default: Preparing network adapters...
==> default: Starting the VMware VM...
==> default: Waiting for the VM to receive an address...
==> default: Forwarding ports...
default: -- 22 => 2222
==> default: Waiting for machine to boot. This may take a few minutes...
default: SSH address: 127.0.0.1:2222
default: SSH username: vagrant
default: SSH auth method: private key
default:
default: Vagrant insecure key detected. Vagrant will automatically replace
default: this with a newly generated keypair for better security.
default:
default: Inserting generated public key within guest...
default: Removing insecure key from the guest if it's present...
default: Key inserted! Disconnecting and reconnecting using new SSH key...
==> default: Machine booted and ready!
==> default: Configuring network adapters within the VM...
==> default: Waiting for HGFS to become available...
==> default: Enabling and configuring shared folders...
```

Enter into the VM using vagrant ssh

Switch to root user using sudo -i

A terminal window titled "Container — root@vagrant: ~ — ssh ◀ vagrant ssh — 56x14". The prompt is "vagrant@vagrant:~\$". The user enters "pwd" and the output is "/home/vagrant". The user enters "sudo -i" and the prompt changes to "root@vagrant:~#". The user enters "whoami" and the output is "root". The user enters "pwd" and the output is "/root". The prompt remains "root@vagrant:~#" with a cursor.

```
vagrant@vagrant:~$ pwd
/home/vagrant
vagrant@vagrant:~$ sudo -i
root@vagrant:~# whoami
root
root@vagrant:~# pwd
/root
root@vagrant:~#
```

root@vagrant:~/emartapp#

- 1 clear
- 2 git clone <https://github.com/devopshydclub/emartapp.git>
- 3 ls
- 4 cd emartapp/
- 5 ls

Bring up containers from docker-compose file

- 6 vim docker-compose.yaml
- 7 docker compose up -d
- 8 docker images
- 9 docker compose ps

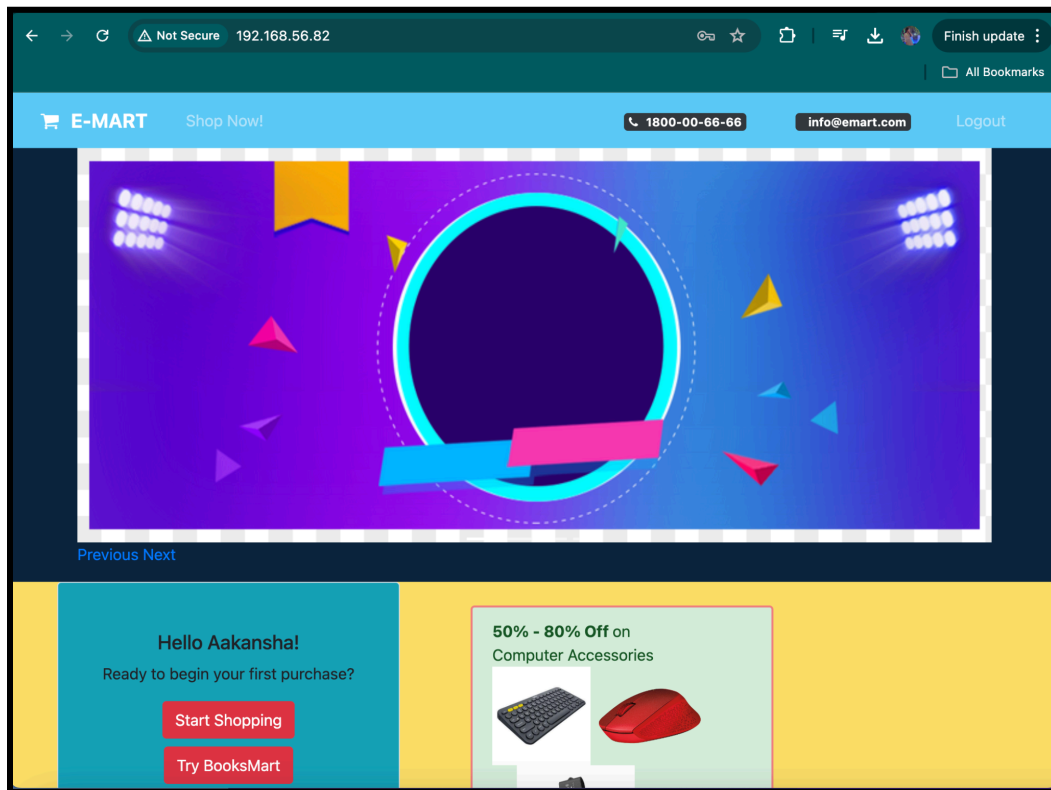
```
Container — root@vagrant: ~/emartapp — ssh • vagrant ssh — 151x20
=> => naming to docker.io/library/emartapp-client 0.0s
=> [client] resolving provenance for metadata file 0.0s
[+] Running 7/7
✔ Network emartapp_default Created 0.1s
✔ Container nginx Started 1.5s
✔ Container emartdb Started 1.5s
✔ Container emongo Started 1.4s
✔ Container webapi Started 1.7s
✔ Container api Started 1.6s
✔ Container client Started 1.9s
root@vagrant:~/emartapp# docker compose ps
[WARN][0000] /root/emartapp/docker-compose.yaml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
NAME IMAGE COMMAND SERVICE CREATED STATUS PORTS
api emartapp-api "docker-entrypoint.s..." api 20 seconds ago Up 18 seconds 0.0.0.0:5000->5000/tcp, :::5000->5000/tcp
client emartapp-client "/docker-entrypoint.s..." client 20 seconds ago Up 18 seconds 80/tcp, 0.0.0.0:4200->4200/tcp, :::4200->4200/tcp
emartdb mysql:8.0.33 "docker-entrypoint.s..." emartdb 20 seconds ago Up 19 seconds 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp
emongo mongo:4 "docker-entrypoint.s..." emongo 20 seconds ago Up 19 seconds 0.0.0.0:27017->27017/tcp, :::27017->27017/tcp
nginx nginx:latest "/docker-entrypoint.s..." nginx 20 seconds ago Up 10 seconds 0.0.0.0:80->80/tcp, :::80->80/tcp
webapi emartapp-webapi "java -jar book-work..." webapi 20 seconds ago Up 9 seconds 0.0.0.0:9000->9000/tcp, :::9000->9000/tcp
root@vagrant:~/emartapp#
```

10 docker ps -a

```
Container — root@vagrant: ~/emartapp — ssh • vagrant ssh — 164x18
root@vagrant:~/emartapp# docker compose ps
[WARN][0000] /root/emartapp/docker-compose.yaml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
NAME IMAGE COMMAND SERVICE CREATED STATUS PORTS
api emartapp-api "docker-entrypoint.s..." api 20 seconds ago Up 18 seconds 0.0.0.0:5000->5000/tcp, :::5000->5000/tcp
client emartapp-client "/docker-entrypoint.s..." client 20 seconds ago Up 18 seconds 80/tcp, 0.0.0.0:4200->4200/tcp, :::4200->4200/tcp
emartdb mysql:8.0.33 "docker-entrypoint.s..." emartdb 20 seconds ago Up 19 seconds 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp
emongo mongo:4 "docker-entrypoint.s..." emongo 20 seconds ago Up 19 seconds 0.0.0.0:27017->27017/tcp, :::27017->27017/tcp
nginx nginx:latest "/docker-entrypoint.s..." nginx 20 seconds ago Up 10 seconds 0.0.0.0:80->80/tcp, :::80->80/tcp
webapi emartapp-webapi "java -jar book-work..." webapi 20 seconds ago Up 9 seconds 0.0.0.0:9000->9000/tcp, :::9000->9000/tcp
root@vagrant:~/emartapp# docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
8d16d1cc4864 emartapp-client "/docker-entrypoint.s..." About a minute ago Up About a minute 80/tcp, 0.0.0.0:4200->4200/tcp, :::4200->4200/tcp client
701b9c26aaf8 emartapp-webapi "java -jar book-work..." About a minute ago Up About a minute 0.0.0.0:9000->9000/tcp, :::9000->9000/tcp webapi
a53008c4cfb4 emartapp-api "docker-entrypoint.s..." About a minute ago Up About a minute 0.0.0.0:5000->5000/tcp, :::5000->5000/tcp api
ba814d6df2ab mongo:4 "docker-entrypoint.s..." About a minute ago Up About a minute 0.0.0.0:27017->27017/tcp, :::27017->27017/tcp emongo
33c0b1abf176 mysql:8.0.33 "docker-entrypoint.s..." About a minute ago Up About a minute 0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp emartdb
795e62e74665 nginx:latest "/docker-entrypoint.s..." About a minute ago Up About a minute 0.0.0.0:80->80/tcp, :::80->80/tcp nginx
root@vagrant:~/emartapp#
```

11 ip addr show

Go to browser enter `http://VMip:80`



Clean up

`root@vagrant:~/emartapp# docker-compose down`

```
Container — vagrant@vagrant: ~ — -zsh — 56x14
root@vagrant:~# exit
logout
[vagrant@vagrant:~$ exit
logout
Connection to 127.0.0.1 closed.
aakansha@M2 Container %
```