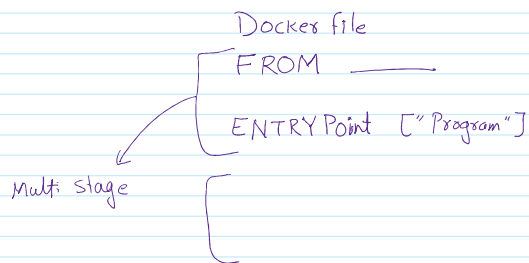
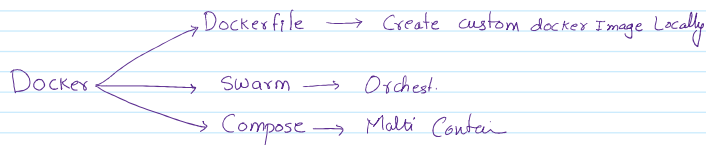


54.14Jun. Containers & Apps(Multi Stage, Python Flask)

Wednesday, June 14, 2023 7:04 PM

Language = Python
Web Framework = Flask
Tool = pip & Virtual env.



Execute Instruction

Entrypoint ["mkdir"]
CMD ["aa", "bb", "cc"]

Linux/Windows\$ mkdir aa bb cc

Dockerfile\$ Entrypoint ["mkdir"]
Dockerfile\$ CMD ["aa", "bb", "cc"]

Linux/Windows\$ python app.py

Dockerfile\$ Entrypoint ["python"]
Dockerfile\$ CMD ["app.py"]

Linux/Windows\$ mvn clean install

Dockerfile\$ Entrypoint ["mvn"]
Dockerfile\$ CMD ["clean", "install"]

\$ nano app.py

```
from flask import Flask  
app = Flask(__name__)
```

```
@app.route('/')  
def hello():  
    return "Hello World!"
```

```
if __name__ == '__main__':  
    app.run(host='0.0.0.0', port=8000)
```

\$ nano requirements.txt

flask

①

②

③ Dockerfile

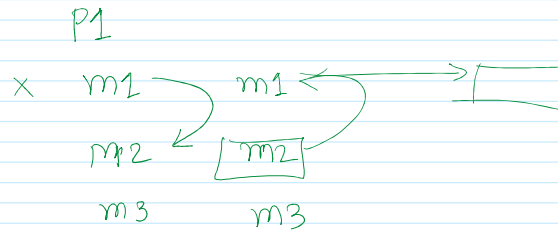
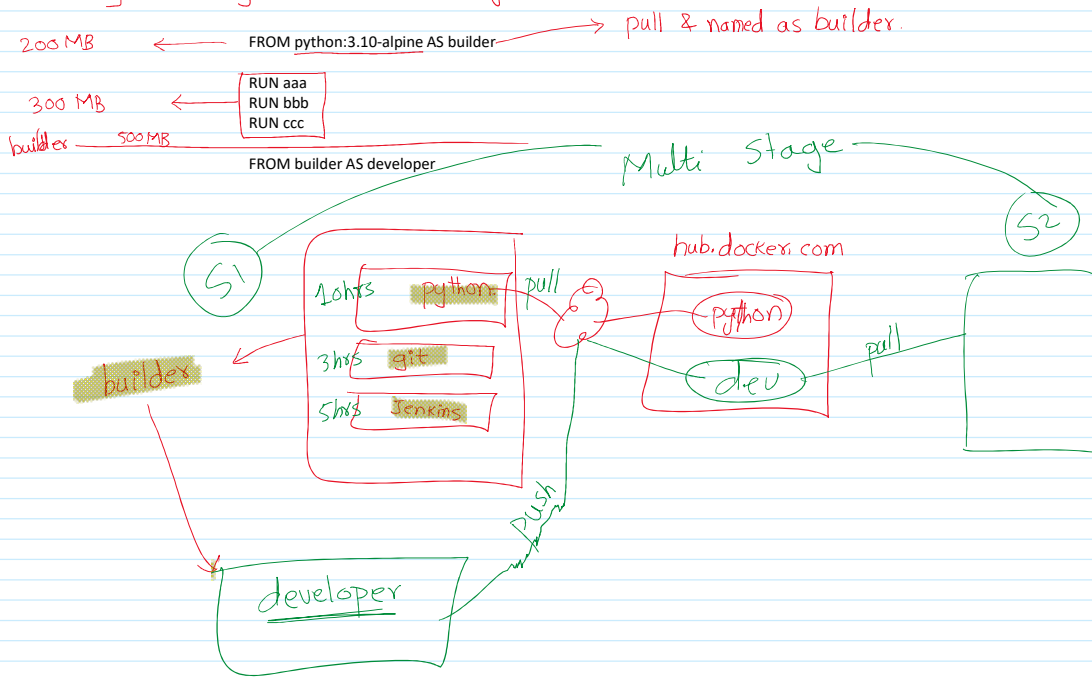
1] Pull Python. docker Image.

FROM python:3.10-slim AS builder

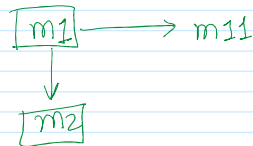
FROM python:3.10-slim AS builder

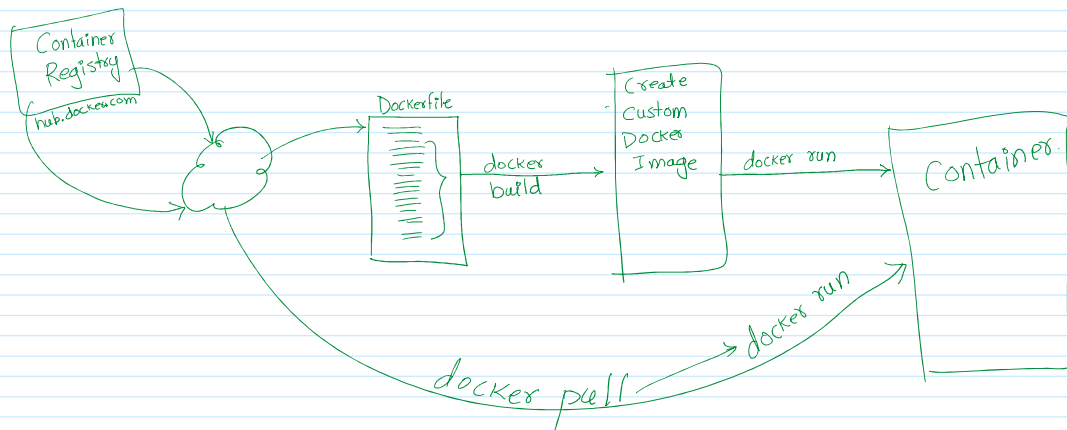
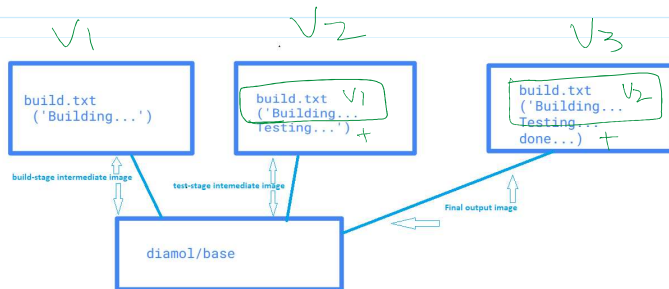
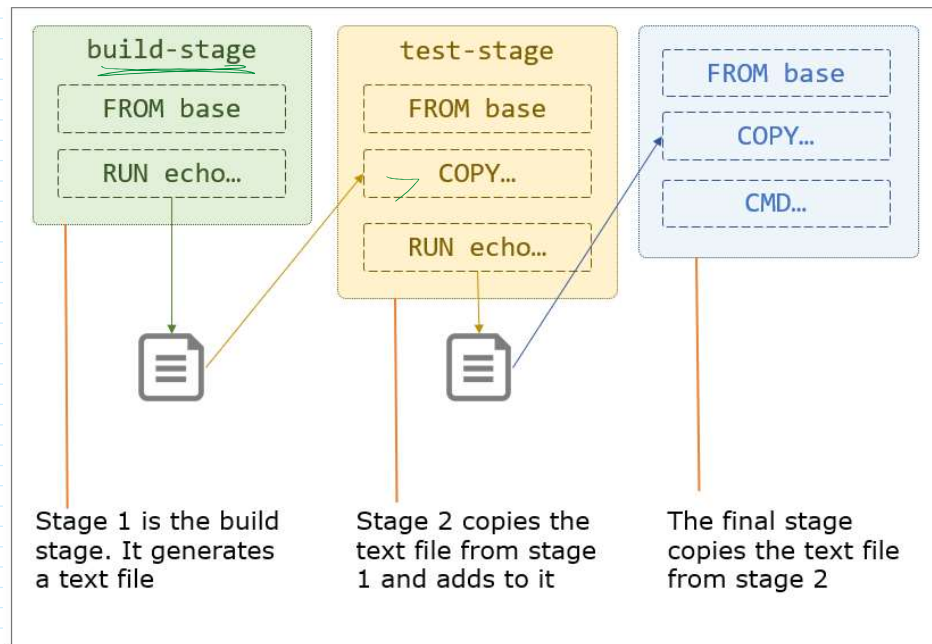
→ pull & named as builder.

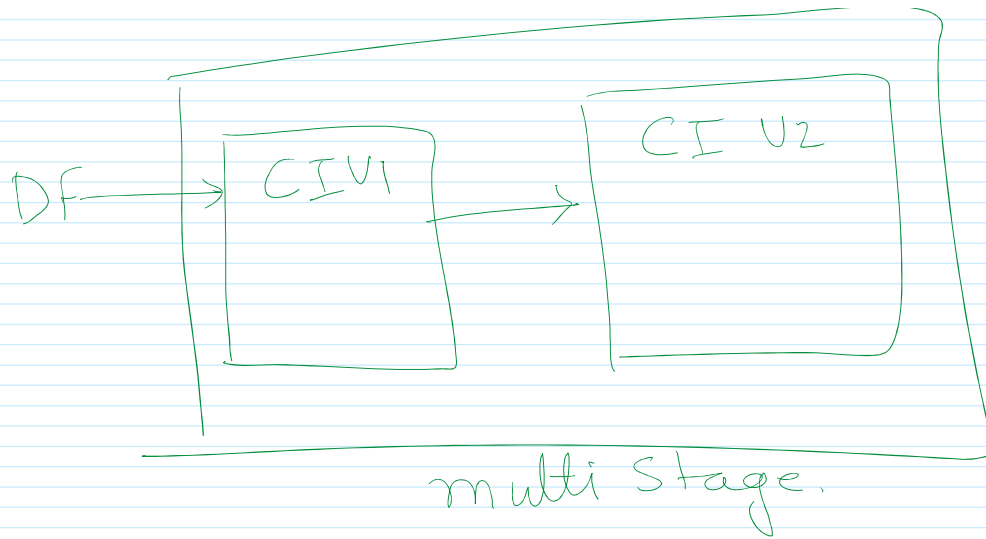
I] Pull Python. docker Image.



Multi Stage = Restore point



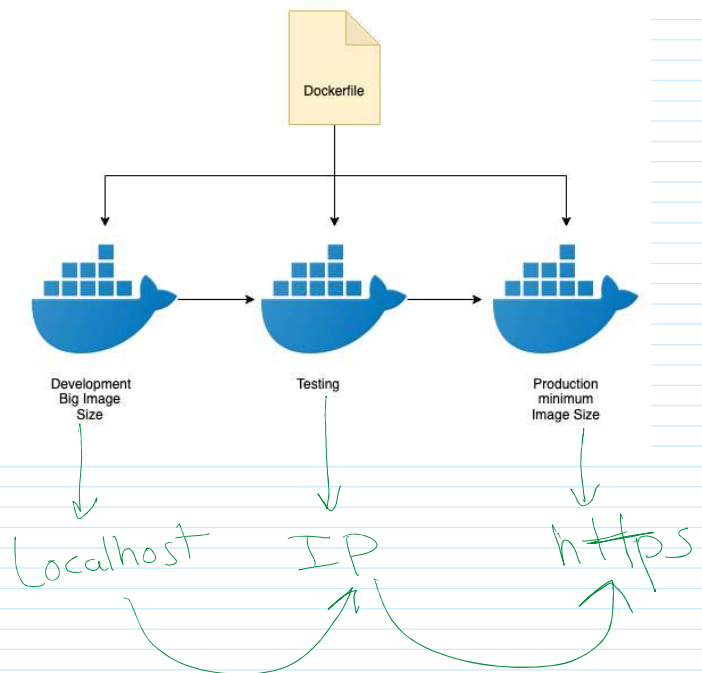




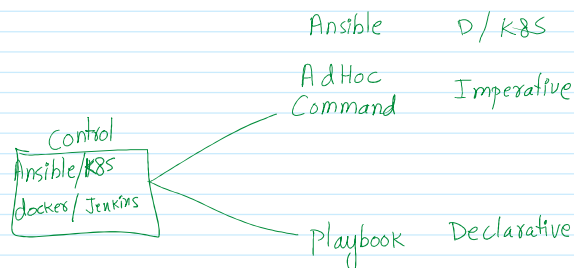
```

1 # Stage - Development
2 FROM Dev-Image as dev
3
4 . . . stage 0
5
6 # Stage - Testing
7 FROM Test-Image as test
8 COPY --from=dev /src/app .
9
10 . . . stage 1
11
12 # Stage - Production
13 FROM Minimum-Image as prod
14 COPY --from=dev /src/app .
15
16 . . . stage 2

```



\$ ssh -i key URL



\$ docker pull ImageName:TagNumber
\$ docker images
\$ docker rmi <image-id>

Dockerfile
FROM python:3.10-alpine
FROM --platform=\$BUILDPLATFORM python:3.10-alpine AS builder

```

FROM --platform=$BUILDPLATFORM python:3.10-alpine AS builder
WORKDIR /app
COPY requirements.txt /app
RUN pip install -r requirements.txt
COPY app.py /app
ENTRYPOINT ["python3"]
CMD ["app.py"]

```

FROM builder as dev-envs

```
RUN <<EOF
apk update
apk add git
EOF
```

```
RUN <<EOF
addgroup -S docker
adduser -S --shell /bin/bash --ingroup docker vscode
EOF
```