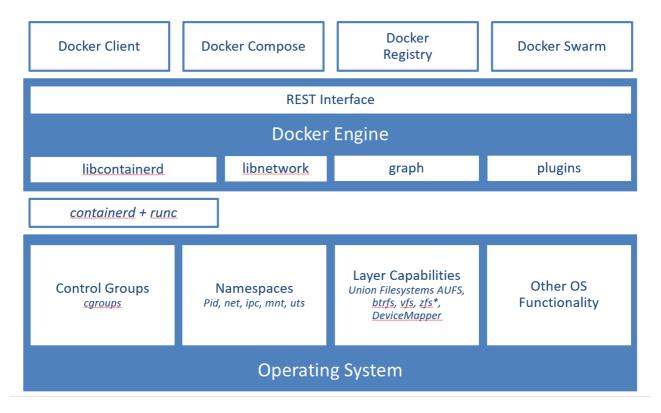
## **How Docker Works**

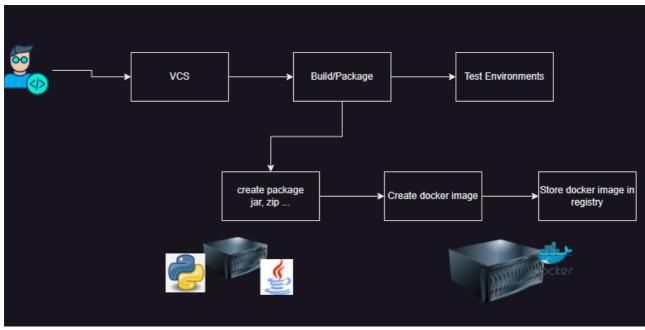
• Refer Here for docker internals

# **Architecture In Linux**



## Using Docker to handle complete build and Package process

Overview



- Advantages:
  - o no need for extra build servers all you need is servers with docker installed.
- Challenges:

- building the package requires extra softwares which are generally not required to run the application
- Docker has provided multi staged build to solve this problem
- Refer Here for multi stage

### Multistage docker build for spring petclinic

- To build spring petclinic
- clone the repo Refer Here
- To build this project we require
  - o jdk 17
  - o maven
- steps

```
git clone https://github.com/dummyrepos/spring-petclinic-june24.git
cd spring-petclinic-june24
mvn clean package
```

- Refer Here for multistage docker file
- now to build the docker image

```
git clone https://github.com/dummyrepos/spring-petclinic-june24.git
cd spring-petclinic-june24
docker image build -t spc:1.0 .
```

#### Exercise: Write a multistage docker file for nopcommerce

- Refer Here for nopcommerce code
- Softwares to build:
  - o ait
  - o dotnet 8 sdk
- Softwares to run
  - o aspdotnet 8 runtime
- Steps to build

```
git clone https://github.com/nopSolutions/nopCommerce.git
cd nopCommerce
mkdir published
dotnet build -c Release -o published/ src/Presentation/Nop.Web/Nop.Web.csproj
cd published
mkdir bin logs
```

- Published folder has all the necesary stuff to run the application
- Now copy this into runtime stage and start the application