**SETTING UP OUR LOCAL PC**

PC requirements for setup of our kubernetes cluster:

* Docker Installation
* Docker-Compose

**Docker Installation Steps:**

Install docker using the repository in your Ubuntu machine.

Before you install Docker Engine for the first time on a new host machine, you need to set up the Docker repository. Afterward, you can install and update Docker from the repository.

Step.1

Update the apt package index and install packages to allow apt to use a repository over HTTPS:

$ sudo apt-get update

$ sudo apt-get install \

ca-certificates \

curl \

gnupg \

lsb-release

Step 2.

Add Docker’s official GPG key

$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg

Step 3.

Add the stable repository using the following command

echo \

"deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu \

$(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

Step 4

Install the Docker enginer

Update the apt package index, and install the latest version of Docker Engine and containerd

$ sudo apt-get update

$ sudo apt-get install docker-ce docker-ce-cli containerd.io

***Then to be able to use docker without sudo, create a new user and add to docker group***

***Using these commands***

Add new User

sudo adduser devops\_engineer01

**# Fill in your password and other personal info**

sudo usermod -aG sudo devops\_engineer01

su - devops\_engineer01

**# Enter your password to login for the user created and then Add User to the Docker Group**

sudo groupadd docker

sudo usermod -aG docker $USER

- Re-Login or Restart the Server

Login to the newly created User

su - devops\_engineer01

**# enter password**

**Test without using sudo**

docker images

**Docker-compose Installation Steps**

**Step1: Run this command to download the current stable release of Docker Compose:**

$ sudo curl -L "https://github.com/docker/compose/releases/download/1.29.0/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

sudo chmod +x /usr/local/bin/docker-compose

**Step2: Apply executable permissions to the binary:**

$ sudo chmod +x /usr/local/bin/docker-compose

**Step3: Test the installation.**

$ docker-compose --version