Create a Virtual Machine (Ubuntu)

sudo apt-get update

// Install docker

// <https://docs.docker.com/engine/install/ubuntu/>

sudo apt-get install \

apt-transport-https \

ca-certificates \

curl \

gnupg-agent \

software-properties-common

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -

sudo apt-key fingerprint 0EBFCD88

sudo add-apt-repository \

"deb [arch=amd64] https://download.docker.com/linux/ubuntu \

$(lsb\_release -cs) \

stable"

sudo apt-get update

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

// Check docker version

sudo docker –v

// NOW INSTALL AZURE CLI ON UBUNTU

// <https://docs.microsoft.com/en-us/cli/azure/install-azure-cli-apt?view=azure-cli-latest>

sudo apt-get update

sudo apt-get install ca-certificates curl apt-transport-https lsb-release gnupg

--------------------

curl -sL https://packages.microsoft.com/keys/microsoft.asc |

gpg --dearmor |

sudo tee /etc/apt/trusted.gpg.d/microsoft.gpg > /dev/null

-----------------------

AZ\_REPO=$(lsb\_release -cs)

echo "deb [arch=amd64] https://packages.microsoft.com/repos/azure-cli/ $AZ\_REPO main" |

sudo tee /etc/apt/sources.list.d/azure-cli.list

sudo apt-get update

sudo apt-get install azure-cli

// Azure cli and docker are installed

Now, we will fetch code from github

git clone https://github.com/gunnarsireus/CompanyCarsDocker.git

cd CompanyCarsDocker

// There are two projects , an Api and a MVC project

ls

//The project is on our machine

**docker-compose** --no-ansi up -d  --force-recreate --remove-orphans

**docker ps**

sudo docker build -t webapiimage:1.0 .

//We get an image

sudo docker images

// Run the following command to start a container based on your new image:

//sudo docker run --publish 8000:8080 --detach --name bb webapiimage:1.0

// Check in browser

Copy IP of VM :8080

// To check running containers

sudo docker ps

Now, we want to store this image in Azure Container Registry

sudo az acr create --resource-group rg --name acrNameVehicle --sku Basic

sudo docker tag carclient acrnamevehicle.azurecr.io/carclient:latest

sudo docker login acrnamevehicle.azurecr.io/carclient:latest

sudo docker push acrnamevehicle.azurecr.io/carclient:latest

sudo docker images

sudo az aks create --resource-group rg --name MyCluster --node-count 3 --generate-ssh-keys --attach-acr acrNameVehicle

sudo az aks install-cli

az aks get-credentials --resource-group rg --name MyCluster

sudddooo kubectl get nodes

version: '3.4'

services:

carapi:

image: acrnamevehicle.azurecr.io/carapi

ports:

- 54411:80

build:

context: .

dockerfile: CarApi/Dockerfile

carclient:

image: acrnamevehicle.azurecr.io/carclient

ports:

- 3443:80

environment:

- CarApiUrl=http://carapi/

build:

context: .

dockerfile: CarClient/Dockerfile

docker-compose.yml

----------------------------

version: '3.4'

services:

carapi:

image: acrnamevehicle.azurecr.io/carapi

ports:

- 54411:80

build:

context: .

dockerfile: CarApi/Dockerfile

carclient:

image: acrnamevehicle.azurecr.io/carclient

ports:

- 3443:80

environment:

- CarApiUrl=http://carapi/

build:

context: .

dockerfile: CarClient/Dockerfile

version: '3.4'

services:

carapi:

image: acrnamevehicle.azurecr.io/carapi

ports:

- "5010:80"

build:

context: .

dockerfile: CarApi/Dockerfile

carclient:

image: acrnamevehicle.azurecr.io/carclient

ports:

- 5021:80

environment:

- CarApiUrl=http://carapi/

build:

context: .

dockerfile: CarClient/Dockerfile