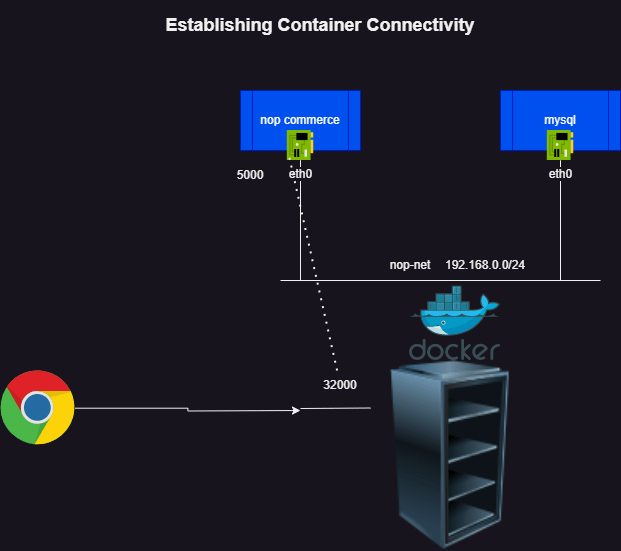
**Communication between applications in Docker**

* Let’s establish container connectivity for the nopCommerce  
  
* Let’s quickly write a Dockerfile for nopCommerce

FROM alpine:3.18.2 AS extractor

ARG DOWNLOAD\_URL="https://github.com/nopSolutions/nopCommerce/releases/download/release-4.60.3/nopCommerce\_4.60.3\_NoSource\_linux\_x64.zip"

ARG TARGET\_FOLDER="/nop"

ADD ${DOWNLOAD\_URL} ${TARGET\_FOLDER}/nopCommerce\_4.60.3\_NoSource\_linux\_x64.zip

RUN apk update && \

apk add unzip && \

cd ${TARGET\_FOLDER} && \

unzip nopCommerce\_4.60.3\_NoSource\_linux\_x64.zip \

&& rm nopCommerce\_4.60.3\_NoSource\_linux\_x64.zip && \

mkdir bin logs

FROM mcr.microsoft.com/dotnet/sdk:7.0

LABEL author=khajaibrahim

ARG TARGET\_FOLDER="/nop"

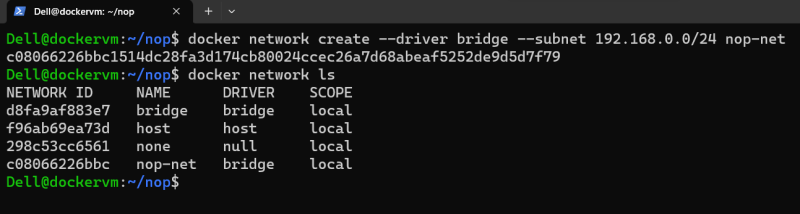
ENV ASPNETCORE\_URLS="http://0.0.0.0:5000"

COPY --from=extractor ${TARGET\_FOLDER} ${TARGET\_FOLDER}

EXPOSE 5000

WORKDIR ${TARGET\_FOLDER}

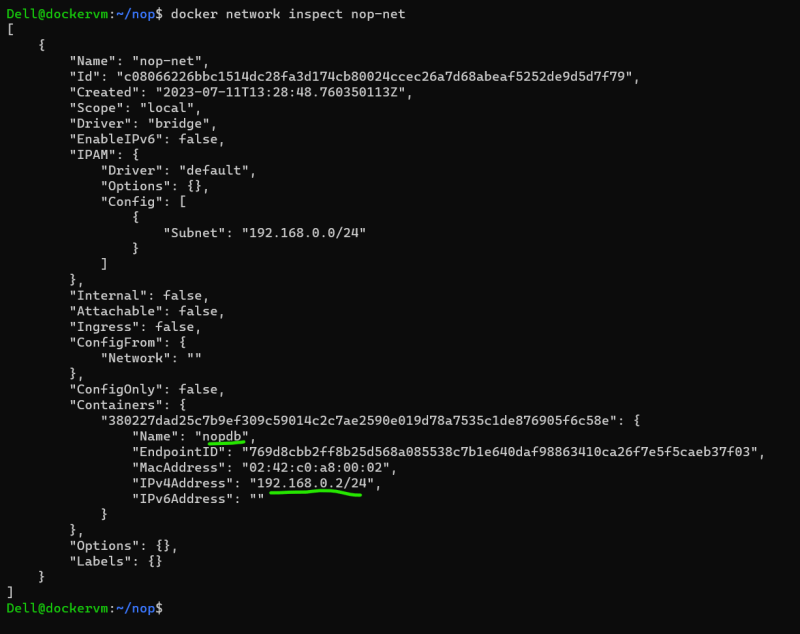
CMD ["dotnet", "Nop.Web.dll"]

* Create a docker image with name nop:4.60.3
* Lets create a bridge network with cidr range 192.168.0.0/24  
  
* Let’s create a mysql container with on nop-net network
  + username => nop
  + pwd => nop@123
  + root password => nop@123
  + database name => nopdb

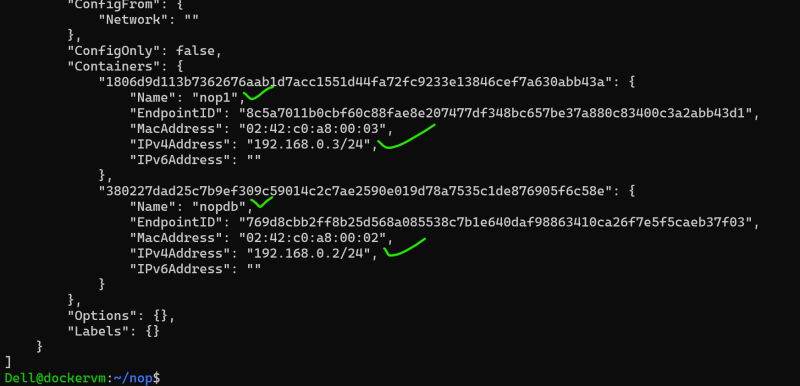
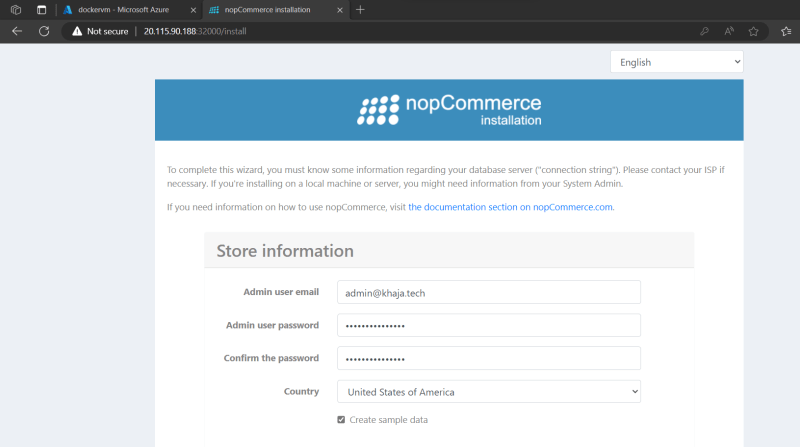
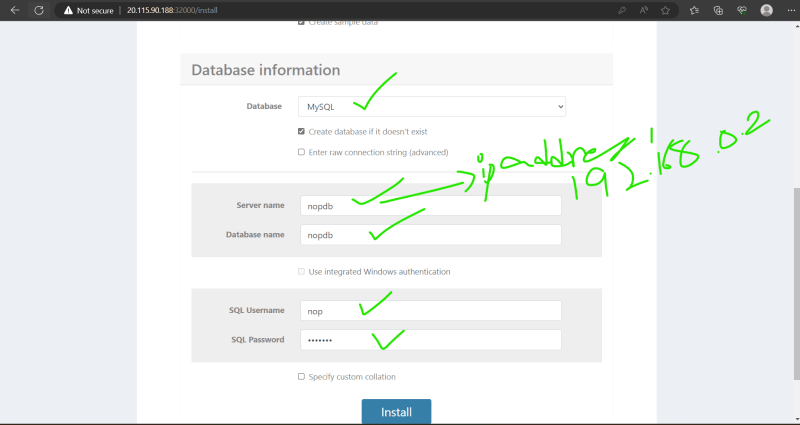
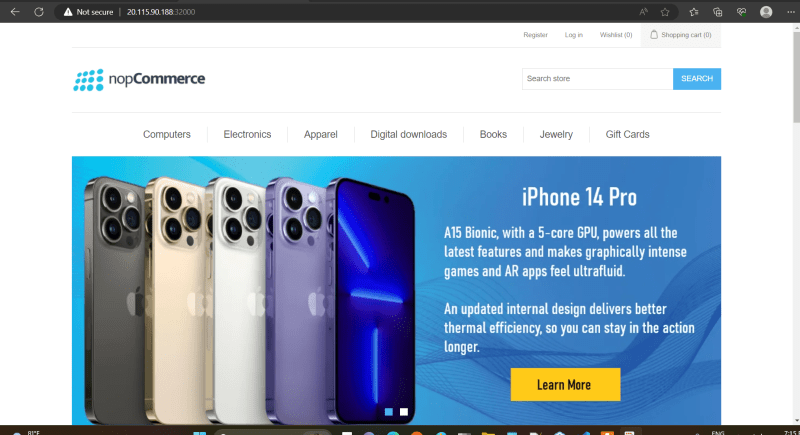
docker container run --name nopdb -d -e MYSQL\_ROOT\_PASSWORD=nop@123 -e MYSQL\_DATABASE=nopdb -e MYSQL\_USER=nop -e MYSQL\_PASSWORD=nop@123 --network nop-net mysql:8

* Let’s inspect ip address for this container

docker network inspect nop-net

  
\* Note: when you practice ensure you create and mount volume  
\* Let’s try creating nop container in the same network

docker container run -d --name nop1 --network nop-net -p 32000:5000 nop:4.60.3

* Let’s inspect network again  
  
* Now lets configure the application by accessing it  
  
* Now enter the data base details  
  
* Once the installation is complete the nop container will be stopped, kindly start it
* Now access the application  
  

**Docker Compose**

* Lets try running nop commerce in a system in easier way
* consider the nopCommerce code from here <https://github.com/CompleteKubernetes/nopCommerceJuly23>
* <https://github.com/CompleteKubernetes/nopCommerceJuly23/commit/152e730fb9d95a8bbed10691c59a12fb1146f72b> for the yaml file created
* Clone the git repo and cd into it
* Then execute

git checkout compose\_intro and docker compose up -d

