**Docker install:**

WINDOWS: <https://docs.docker.com/desktop/windows/install/>

Mac: <https://docs.docker.com/desktop/mac/install/>

**docker --version**

***package.json:***

{

"name": "yay-docker",

"dependencies": {

"express": "^4.17.1"

}

}

***server.js:***

const server = require("express")();

server.listen(8080, async () => { });

server.get("/yay-docker", async (\_, response) => {

console.log('Request Received for yay-docker');

response.json({ "yay": "docker" });

});

***Dockerfile:***

FROM node:17-slim

WORKDIR /app

COPY . .

RUN npm install

CMD ["node", "server.js"]

EXPOSE 3000

**Create An Image**

docker build -t yay-docker .

**Run The Image As Container**

docker run -p 3000:8080 -d yay-docker

Open Browser: <http://localhost:3000/yay-docker>

**List Containers**

docker ps -a

**Container Logs**

docker logs <container-id>

**Entering The Container**

docker exec -it <container-id> /bin/sh

**Start Container**

docker start <container-id>

**Stop Container**

docker stop <container-id>

**Remove Container**

docker rm <container-id>

**Dockerfile**

FROM <BASE\_IMAGE>  
COPY <SRC> <DTS  
RUN <COMMANDS\_AT\_BUILD\_TIME>  
CMD <ENTRY\_COMMANDS\_AT\_RUNTIME>

FROM

COPY . .

RUN pip install --no-cache-dir -r requirements.txt

CMD ["python", "./app.py"]

**requirements.txt**

numpy  
pandas  
scikit-learn

**Building a Docker image**

docker build -t <IMAGE\_NAME> .

docker build -t test-model .

docker images

**Running a Docker image**

docker run -rm --name <CONTAINER\_NAME> <IMAGE\_NAME>

docker run --rm -v `pwd`:/app\_home test-model

**Saving a Docker image to the Docker Hub**

Create an account: <https://hub.docker.com/>

docker login

docker -tag <MY\_LOCAL\_IMAGE> <MY\_LOCAL\_IMAGE>:<MY\_TAG>

docker tag <MY\_LOCAL\_IMAGE>:<MY\_TAG> <MY\_ACCOUNT>/<MY\_LOCAL\_IMAGE>:<MY\_TAG>

docker push <MY\_ACCOUNT>/<MY\_LOCAL\_IMAGE>:<MY\_TAG>

**Getting a Docker image from the Docker Hub**

docker pull <MY\_ACCOUNT>/<MY\_LOCAL\_IMAGE>