**FRONTEND(MDM-MFE)**

* Cloned the GitLab repository into IDE
* Create a Dockerfile

FROM node:16.20.1-alpine as node

WORKDIR /app

ENV PATH /app/node\_modules/.bin:$PATH

COPY package.json /app/package.json

RUN npm install

RUN npm install -g @angular/cli

COPY . /app

CMD ng serve --host 0.0.0.0

* In Terminal Build the docker file with command

Docker build -t <docker username>/<image name>

* Run the Dockerfile with adding port

docker run -p 4200:4200 <image name>

* This creates a image and to check the image

Docker images

* To run the docker image

Docker run (image name or id)

* To push the image to docker hub

docker push sravyaj02/mdm-service

**Pushing the code from Local to GitLab:**

* Clone the running code from GitLab to respective IDE(vs code)
* Check the exact branch where you want to push change the branch from down left corner and check it by using **GIT BRANCH**
* Copy the code from local to cloned folder
* In terminal

**git status**

**git add .**

**git commit -m “msg”**

**git push**

* In GitLab add a new file ‘gitlab-ci.yml’ to specify instructions for GitLab CI/CD

variables:

IMAGE: node:16.20.1-alpine

CI\_REGISTRY\_IMAGE: sravyaj02/frontend

stages:

# - build

- build-image

#build-job:

# image: $IMAGE

# stage: build

# script:

# - echo "Compiling the code..."

# - npm install

# - npm install -g @angular/cli

# - ng build

# artifacts:

# paths:

# - dist/\*

build-image:

image: docker:latest

services:

- docker:dind

stage: build-image

script:

- docker build -t "$CI\_REGISTRY\_IMAGE" .

- docker login -u "$DOCKER\_USERNAME" -p "$DOCKER\_PASSWORD" $CI\_REGISTRY

- docker push "$CI\_REGISTRY\_IMAGE"

* Click on Commit changes button which triggers the pipeline automatically.
* Check whether the stages of pipeline is is getting succeeded.
* Now to run the image or to check the portal is working on
* Pull the latest image from docker hub to local

Docker pull <image name>

* Run the image to check the portal

Docker run -p 8090:8090 <image name>

**To Automate this entire process:**

* To automate this we need to run the script where the script give the instructions or steps how to automate the manual process.
* Bash script :

#!/bin/bash

DOCKER\_USERNAME=sravyaj02

DOCKER\_PASSWORD=jonnalagadda

docker login -u $DOCKER\_USERNAME -p $DOCKER\_PASSWORD

IMAGE\_NAME=$1

if docker image inspect $IMAGE\_NAME > /dev/null; then

# The Docker image exists, so pull it

echo "Pulling Docker image..."

docker pull $IMAGE\_NAME

fi

echo "Running Docker image..."

winpty docker run -it $IMAGE\_NAME

* Save this file as deploy.sh and do gitbash from the path where it got saved

chmod 755 deploy.sh

bash deploy.sh <image name>

This run the script and we can check the portal is working or not.