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Nodejs application using docker file

Introduction :

This document provides a guide for implementing a Docker container for the Node.js Chat App using the provided Dockerfile. The Dockerfile defines the environment and dependencies required to run the application within a Docker container.

Prerequisites:

- Docker installed on the host machine.
- Internet connectivity to download dependencies during the Docker build process.

Step-1

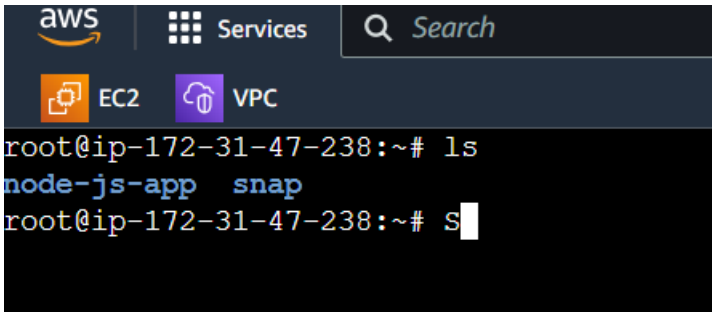
Login through aws console , start your ubantu instance & install docker in it

Connect ec2 instance

Step-2

Create directory as nodejsapp

#mkdir nodejsapp

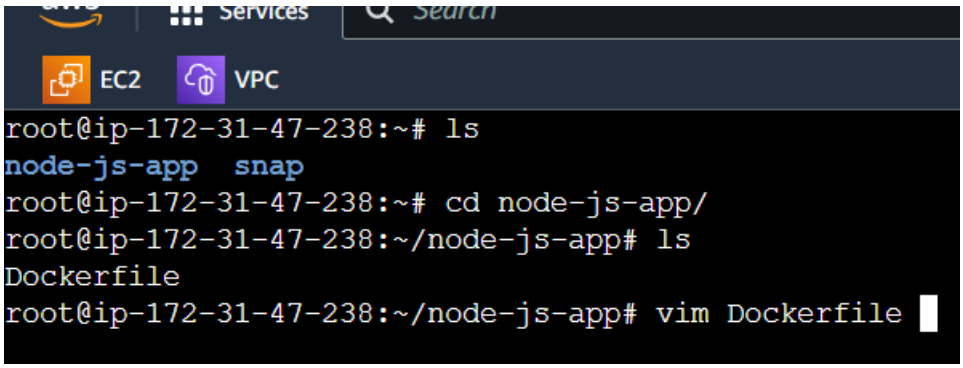


Step-3

Create Dockerfile in that directory with vim command

#cd nodejsapp

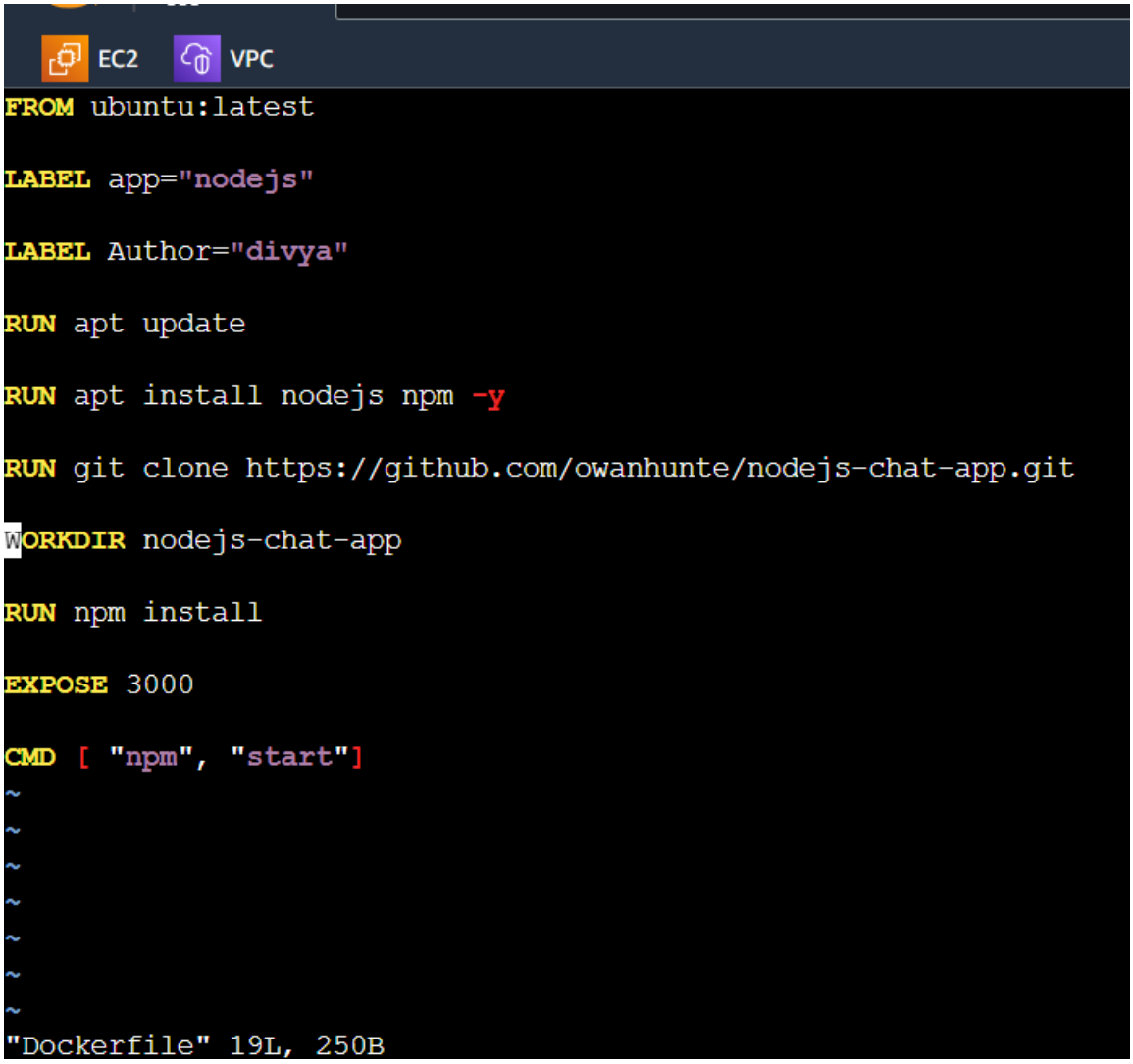
#vim Dockerfile



Step-4

Paste following content inside the Docker file

```
FROM ubuntu:latest

LABEL app="nodejs"

LABEL Author="divya"

RUN apt update

RUN apt install nodejs npm -y

RUN git clone https://github.com/owanhunte/nodejs-chat-app.git

WORKDIR nodejs-chat-app

RUN npm install

EXPOSE 3000

CMD [ "npm", "start" ]
```



Step-5

Enter command “docker build .” to create an docker image

```
root@ip-172-31-47-238:~/node-js-app# docker build .
[+] Building 1.4s (10/10) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 289B
 => [internal] load metadata for docker.io/library/ubuntu:latest
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [1/6] FROM docker.io/library/ubuntu:latest@sha256:77906da86b60585ce12215807090eb327e7386c8fafb5402369e421f44eff17e
 => CACHED [2/6] RUN apt update
 => CACHED [3/6] RUN apt install nodejs npm -y
 => CACHED [4/6] RUN git clone https://github.com/owanhunte/nodejs-chat-app.git
 => CACHED [5/6] WORKDIR nodejs-chat-app
 => CACHED [6/6] RUN npm install
 => exporting to image
 => => exporting layers
 => => writing image sha256:9e7b533eff082ba03b4f9d924fe4e8031fb9876c5ba5558fdc9365b4605905b6
root@ip-172-31-47-238:~/node-js-app#
```

Step-6

List the images by using command “docker images”

```
root@ip-172-31-47-238:~/node-js-app# docker images
REPOSITORY    TAG        IMAGE ID       CREATED        SIZE
<none>        <none>     9e7b533eff08   5 hours ago    964MB
root@ip-172-31-47-238:~/node-js-app#
```

Step-7

Create container with the help of docker image

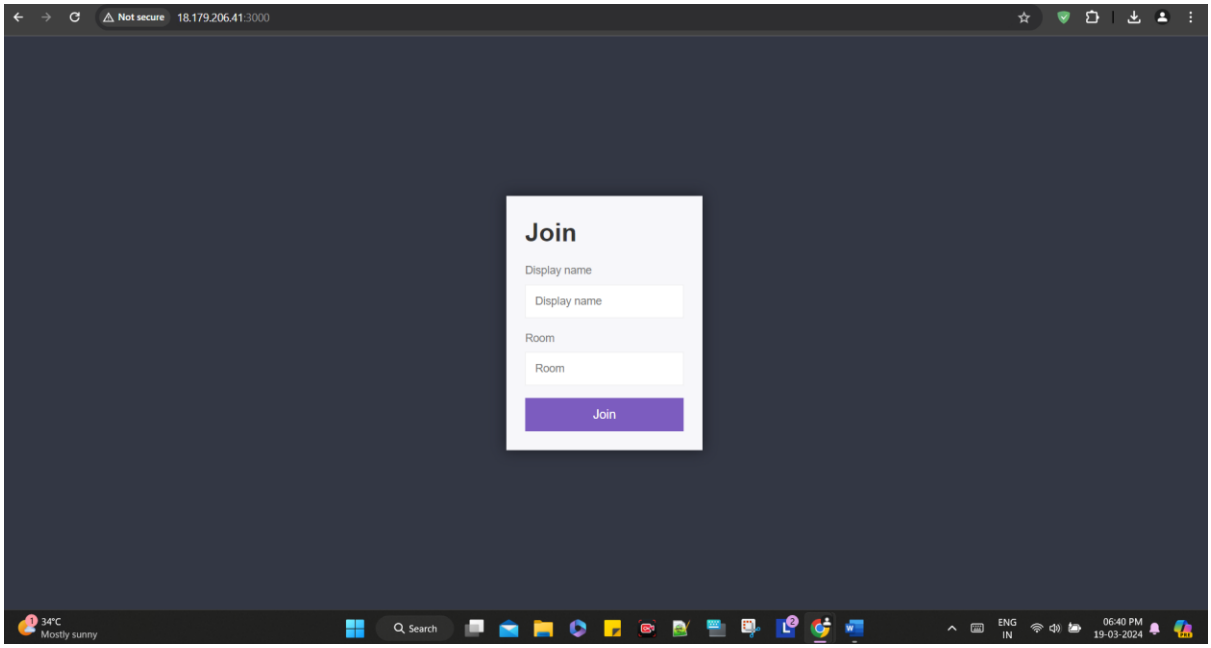
#docker run -d -p 3000:3000

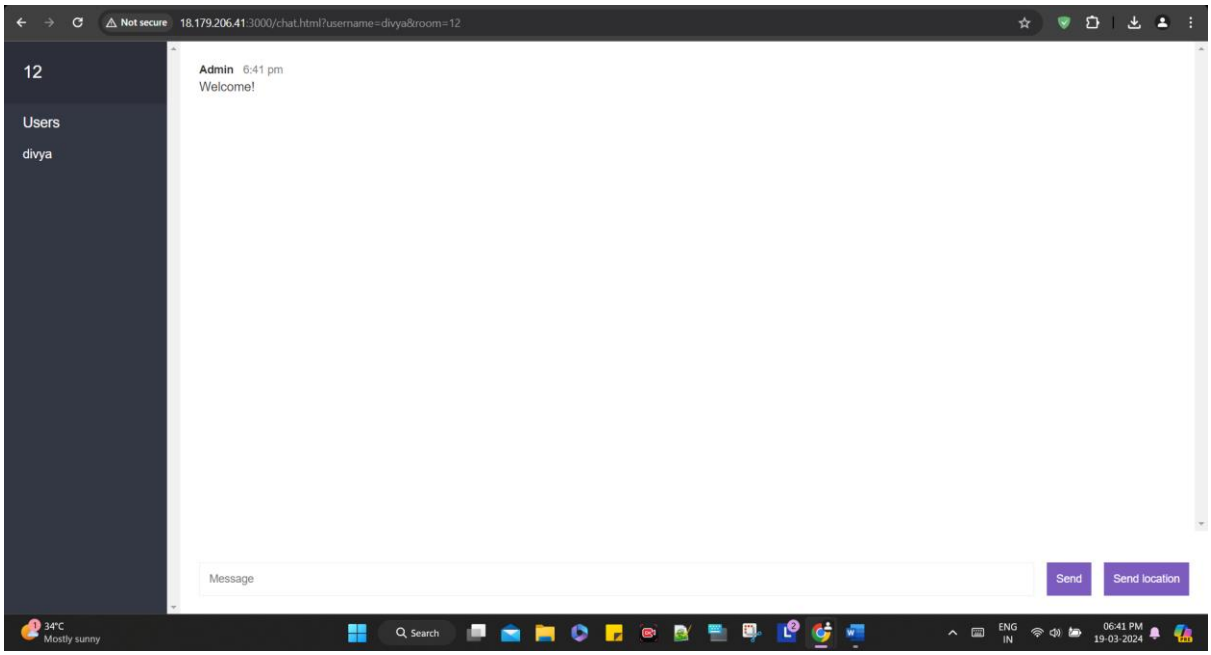
```
root@ip-172-31-47-238:~/node-js-app# docker run -d -p 3000:3000 9e7b
7630ced847dc8108bf688ac056e1130b604542e69ae7efede6d25074c2a12bd6
root@ip-172-31-47-238:~/node-js-app# docker ps
CONTAINER ID   IMAGE     COMMAND       CREATED          STATUS          PORTS                                       NAMES
7630ced847dc   9e7b      "npm start"   9 seconds ago    Up 8 seconds    0.0.0.0:3000->3000/tcp, :::3000->3000/tcp   competent_mclaren
root@ip-172-31-47-238:~/node-js-app#
```

Step-8

Check the application in browser

http//<IP of instance>:3000


Not secure
18.179.206.41:3000
Join
Display name
Display name
Room
Room
Join


Not secure
18.179.206.41:3000/chat.html?username=divya&room=12
12
Users
divya
Admin 6:41 pm
Welcome!
Message
Send
Send location