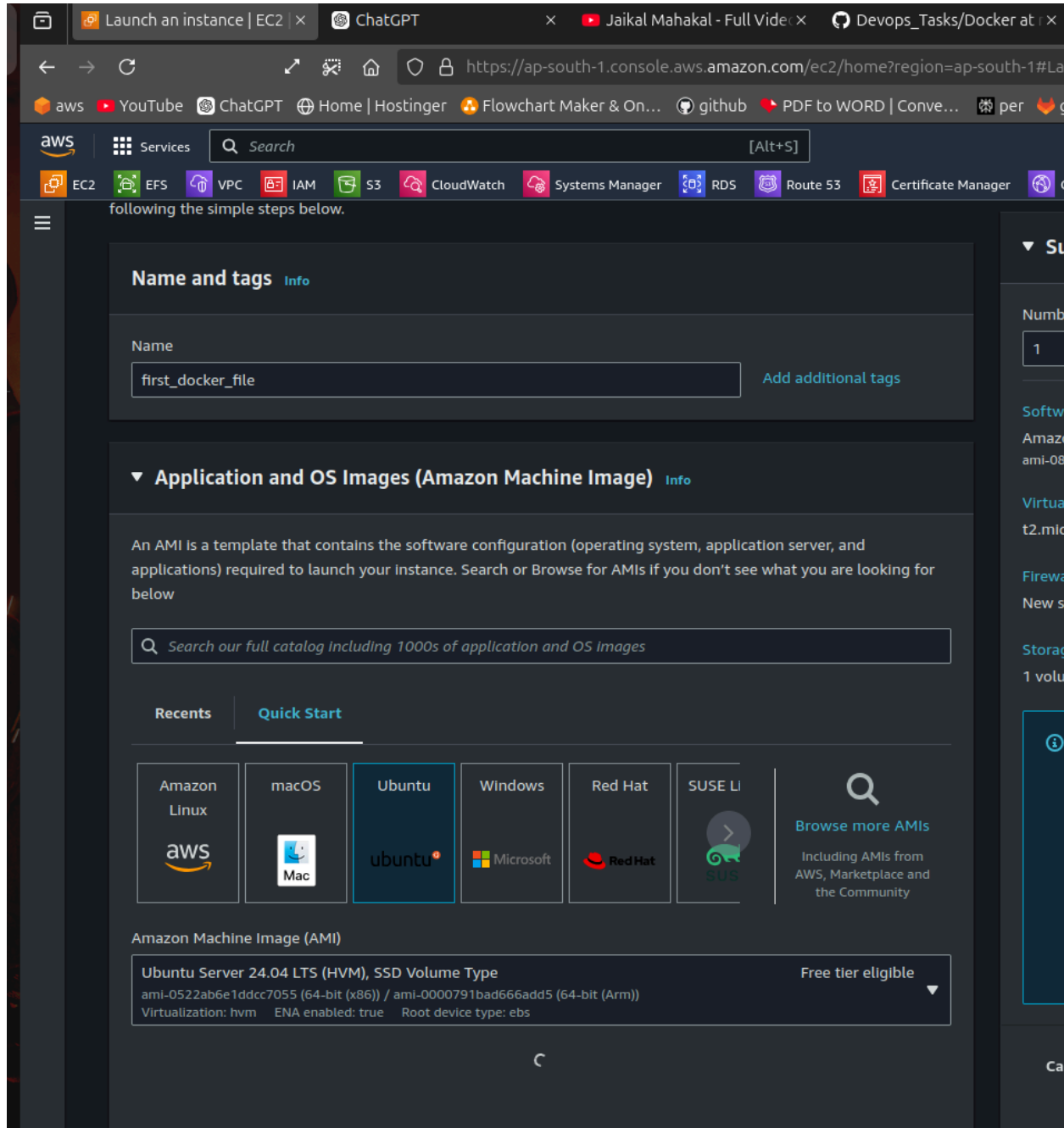


Task : Creating_First_Dockerfile

Step 1: Create and ec2 instance



Launch an instance | EC2

ChatGPT

Jaikal Mahakal - Full Vide

Devops_Tasks/Docker at

← → ↺ ↻ ↗ ↶ ↷

https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#La

aws YouTube ChatGPT Home | Hostinger Flowchart Maker & On... github PDF to WORD | Conve... per

aws Services Search [Alt+S]

EC2 EFS VPC IAM S3 CloudWatch Systems Manager RDS Route 53 Certificate Manager

Architecture

AMI ID

64-bit (x86)

ami-0522ab6e1ddcc7055

Verified provider

▼ Instance type Info | Get advice

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Linux base pricing: 0.0124 USD per Hour

On-Demand Windows base pricing: 0.017 USD per Hour

On-Demand RHEL base pricing: 0.0268 USD per Hour

On-Demand SUSE base pricing: 0.0124 USD per Hour

Free tier eligible

All generations

Compare Instance types

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) Info

You can use a key pair to securely connect to your Instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

seytan_cloud

Create new key pair

▼ Network settings Info

VPC - required Info

vpc-09066077d7529c57f

(default)

Step 2: Take ssh of that instance .

```
ubuntu@ip-172-31-14-237: ~  
seytan@seytan-Inspiron-3501:~$ ssh -i seytan_cloud.pem ubuntu@43.204.234.37  
The authenticity of host '43.204.234.37 (43.204.234.37)' can't be established.  
ED25519 key fingerprint is SHA256:2uKaINrc62/RfJ1zpPKQESGisxSaznLZ5700RwPylVQ.  
This key is not known by any other names.  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added '43.204.234.37' (ED25519) to the list of known hosts.  
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1012-aws x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/pro  
  
System information as of Wed Sep 18 08:46:18 UTC 2024  
  
System load:  0.15          Processes:            107  
Usage of /:   22.8% of 6.71GB Users logged in:           0
```

Step 3: Create a Dockerfile and then build the docker image. Command : `docker build -t first_docker .`

What is docker file?

→A Dockerfile is a text file with instructions to build a Docker image, defining the base image, commands to run, and files to include. It ensures consistent environments and simplifies deployment of containerized applications.

```
ubuntu@ip-172-31-14-237:~$ nano Dockerfile
ubuntu@ip-172-31-14-237:~$ sudo docker build -t first_docker .
[+] Building 3.6s (9/9) FINISHED
=> [internal] load build definition from Dockerfile
=> [internal] load metadata for docker.io/library/nginx:latest
=> [internal] load .dockerignore
=> [internal] transferring context: 2B
=> [1/5] FROM docker.io/library/nginx:latest@sha256:04ba374043ccd2fc5c593885c0eacddebab5ca375f9323666f28dfd5a9710e3
=> CACHED [2/5] RUN apt-get update && apt-get install -y unzip wget
=> [3/5] RUN wget -O /usr/share/nginx/html/restoran.zip https://www.free-css.com/assets/files/free-css-templates/download/page290/restoran.zip && unzip /usr/share/nginx/html/restoran.zip
=> [4/5] WORKDIR /usr/share/nginx/html/
=> [5/5] RUN mv bootstrap-restaurant-template/* ./
=> exporting to image
=> exporting layers
=> writing image sha256:eeeca8874ed364f89f7c36b67e4a199d5b15afa4964826fcf2555393a85e99776
=> naming to docker.io/library/first_docker
ubuntu@ip-172-31-14-237:~$ _
```

```
GNU nano 7.2 Dockerfile
FROM nginx:latest

RUN apt-get update && \
    apt-get install -y unzip wget

RUN wget -O /usr/share/nginx/html/restoran.zip https://www.free-css.com/assets/files/free-css-templates/download/page290/restoran.zip \
    && unzip /usr/share/nginx/html/restoran.zip -d /usr/share/nginx/html/

WORKDIR /usr/share/nginx/html/
RUN mv bootstrap-restaurant-template/* ./

EXPOSE 80

CMD ["nginx", "-g", "daemon off;"]
```

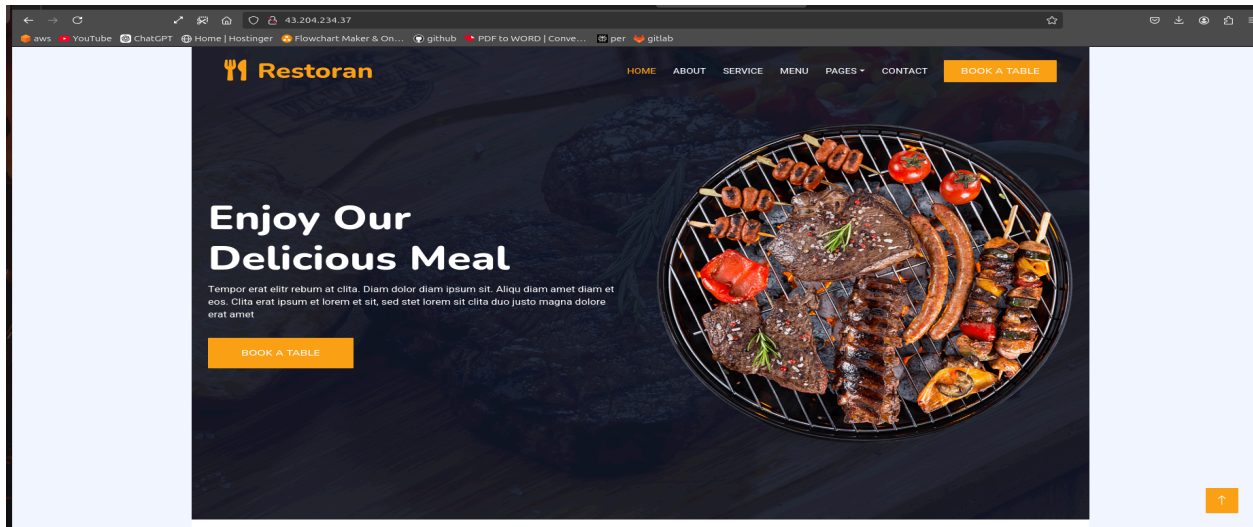
Step 4: Now verify the build image and run the container using following command:

docker run -d -p 80:80 image_id

Once done check container status using →docker ps

```
ubuntu@ip-172-31-14-237:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
first_docker  latest   eeeca8874ed36  34 seconds ago  216MB
ubuntu@ip-172-31-14-237:~$ sudo docker run -d -p 80:80 eeeca8874ed36
00669db3d6945e501afb4bb32d184631c4b4eb813bf4c2330a9c6c01ee14f5d1
ubuntu@ip-172-31-14-237:~$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                               NAMES
00669db3d694   eeeca    "/docker-entrypoint..."  5 seconds ago  Up 4 seconds  0.0.0.0:80->80/tcp, :::80->80/tcp  admiring_ride
ubuntu@ip-172-31-14-237:~$ _
```

Output: Now go and paste public ip in web browser and see the output.



Conclusion: By following these steps, you have created and run a Docker container for a simple application. The Dockerfile you created is a text document that contains all the commands to assemble the Docker image.