PROJECT-2

Installing and enabling docker inside ubuntu terminal

Run the below commands:

- sudo apt update && sudo apt upgrade -y
- sudo apt install -y ca-certificates curl gnupg lsb-release
- sudo mkdir -p /etc/apt/keyrings
- curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo tee /etc/apt/keyrings/docker.asc > /dev/null
- sudo chmod a+r /etc/apt/keyrings/docker.asc
- echo "deb [arch=\$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu \$(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
- sudo apt update
- sudo apt install -y docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin
- sudo systemctl start docker
- sudo systemctl enable docker
- sudo docker --version
- sudo usermod -aG docker \$USER
- newgrp docker

Connecting ubuntu terminal with GUI based portainer

```
1)sudo docker pull portainer/portainer-ce
2)sudo docker run -d -p 9000:9000 --name=portainer --restart=always \
-v /var/run/docker.sock:/var/run/docker.sock \
-v portainer_data:/data \
portainer/portainer-ce
3) go to http://localhost:9000 and enter password
```

* Deploy an Nginx Web Server with Docker

1: Pull the Nginx Image

Run the following command to pull the official Nginx image:

2: Run an Nginx Container

Start a container and map port 80 to access it from your browser:

```
bash
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docker run -d -p 8080:80 --name my-nginx nginx
```

Now, open http://localhost:8080 in your browser, and you should see the Nginx welcome page.

3: Customize Nginx with Your Own HTML Page

1. Create a directory for your Nginx files:

```
mkdir nginx project && cd nginx project
```

2. Create an index.html file inside this directory:

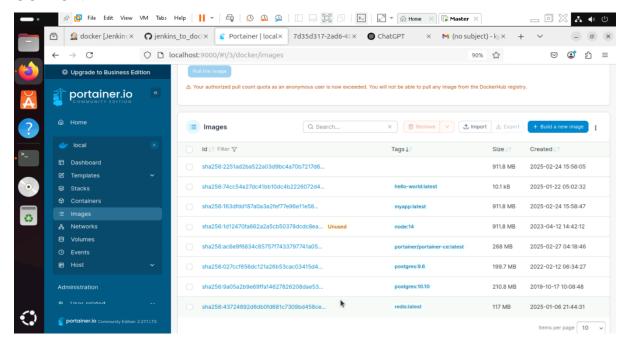
3. Run a new Nginx container with your custom HTML page:

```
docker run -d -p 8081:80 --name custom-nginx -v
$(pwd):/usr/share/nginx/html nginx
```

4. Refresh http://localhost:8081, and you should see your custom page.

OUTPUT:

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Hello, this is a custom Nginx page inside Docker!

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