LAB EXERCISE 2

DEVELOPING A WEB APPLICATION WITH MULTIPLE CONTAINERS ON A SINGLE HOST

To Develop a Web Application with Multiple Containers on a Single Host Using Windows PowerShell in Docker Desktop.

PROCEDURE TO IMPLEMENTATION:

STEP 1: Go to docker folder directory and navigate to that directory in your terminal.

STEP 2: Create a new directory where you want to store your Docker Compose file

mkdir myapp

cd myapp

STEP 3: Create the Docker Compose File:

In Windows, you can create an empty file using the echo command like this:

echo. > docker-compose.yml

STEP 4: Open Notepad or any text editor of your choice.

STEP 5: Edit the Docker Compose File**:** Below is an example with two containers: one running an Nginx web server and the other running an hello-world.

```
version: '3'
services:
  webapp:
    image: nginx:latest
    ports:
      - "80:80"
  database:
    image: hello-world:latest
    environment:
      POSTGRES_USER: di…….@gmail.com  #Username
      POSTGRES_PASSWORD: D…..23              #Password
      POSTGRES_DB: yourdatabase
```

STEP 6: Open a PowerShell window

Navigate to the Directory with Your Compose File:

Use the cd command to navigate to the directory where you saved your docker-compose.yml file.

Cd C:\Users\ibmtr\OneDrive\Desktop\Docker\myapp

STEP 7: Run Docker Compose:

To start your containers, use the following command:

docker-compose up

STEP 8: Once your containers are running, you can access your containers from Docker Desktop in your system.