PROJECT - 1

Multi-Container Flask Application with PostgreSQL Using Docker Compose

Overview

This project sets up a Flask application with a PostgreSQL database using Docker Compose. The application connects to PostgreSQL and provides a simple API to check the database connection.

Prerequisites

Before running this project, ensure you have the following installed:

- Docker

- Docker Compose

- Check if Docker Compose is available in your system:

- docker-compose version

- If not installed, install it manually:

- sudo apt install docker-compose-plugin

Project Structure

Flask-Docker/

├── app.py Flask application

├── requirements.txt Python dependencies

├── Dockerfile Dockerfile for Flask app

├── docker-compose.yml Docker Compose configuration

└── README.md Project documentation

Setup and Running the Application

Step 1: Clone the Repository

git clone

cd Flask-Docker

Step 2: Build and Start the Containers

docker-compose up -d --build

This will:

- Build the Flask application image

- Start the PostgreSQL database container

Step 3: Verify the Running Containers

docker ps

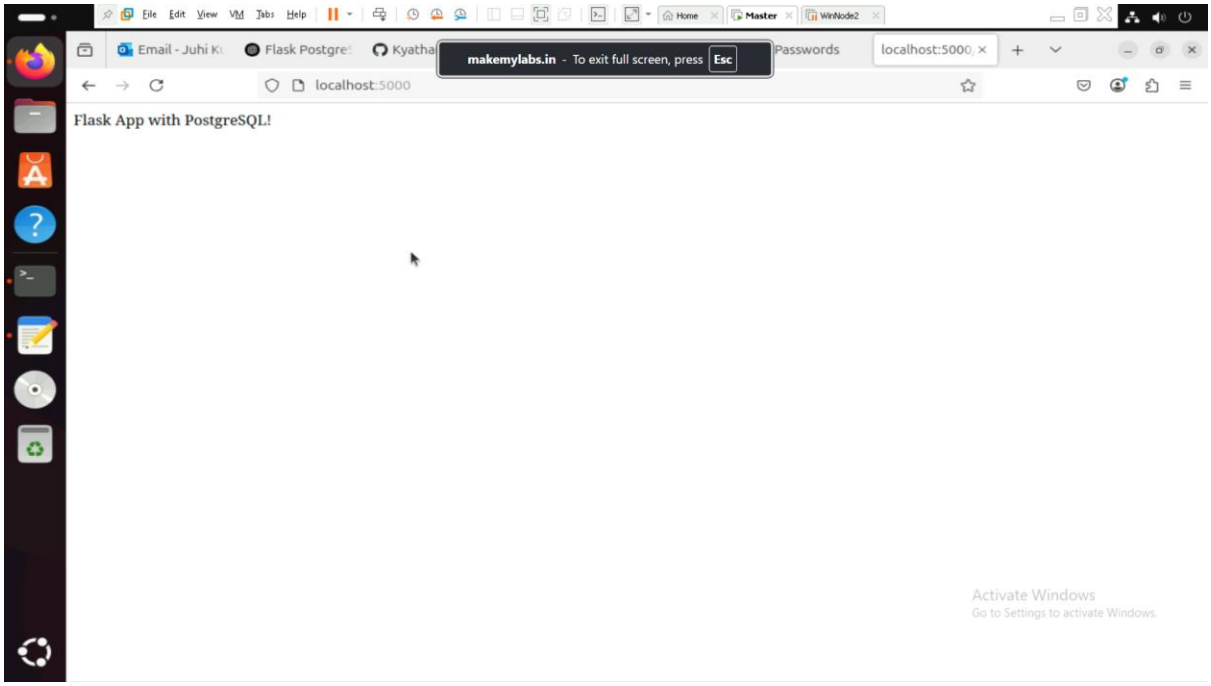
You should see `web` (Flask app) and `db` (PostgreSQL) services running.

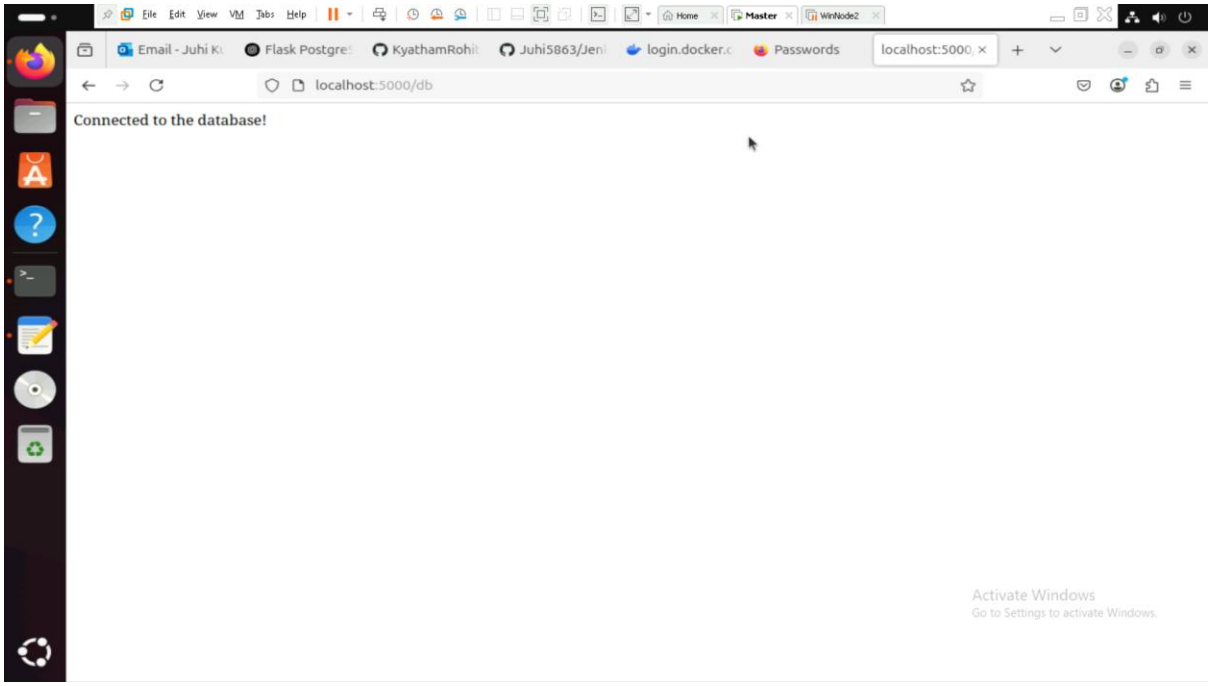
Step 4: Test the Application

Open your browser or use `curl` to access the endpoints:

- `http://localhost:5000/` → Should return `"Flask App with PostgreSQL!"`

- `http://localhost:5000/db` → Should confirm database connection




File Edit View VM Tabs Help
Home
Master
WinNode2
Email - Juhi K
Flask Postgre
KyathamRohit
Juhi5863/Jen
login.docker.c
Passwords
localhost:5000
localhost:5000/db
Connected to the database!
Activate Windows
Go to Settings to activate Windows.