**Title:**  
*Hands-On L3: Docker & Multi-Container Microservice*

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**1**. **Objective**

The objective of this hands-on exercise was to install Docker Desktop, run a PostgreSQL container, and build a Python Flask web application that connects to a Redis cache using Docker Compose.

**2. Steps Performed**

Installed and verified Docker Desktop.

Pulled PostgreSQL image and created a container (postgres1).

Accessed PostgreSQL using psql.

Built a Flask app (app.py) and defined dependencies in requirements.txt.

Created a Dockerfile to containerize the Flask app.

Defined services (web, redis) in compose.yaml.

Ran the containers using docker compose up.

Opened the web app in a browser at <http://localhost:8000>.

**3. Screenshots**

Docker Desktop showing running containers (postgres1, web, redis).

Browser output: Hello World! I have been seen X times.

Count increases:

A screenshot of a computer

AI-generated content may be incorrect.

Terminal logs from docker compose up.

A screenshot of a computer program

AI-generated content may be incorrect.