**Setup Process**

**Step 1: Prepare the Environment**

Installed Docker Desktop.

Create a directory for the project.

**Step 2:Create Configuration Files**

“Dockerfile” and “docker-compose.yml”

**Step 3: Build the Docker Image**

Run: docker-compose build

**Step 4: Start the Containers**

Run: docker-compose up -d

This starts the Moodle and MySQL containers in detached mode.

**Step 5: Set Up Moodle**

1. Set Permissions

sudo chown -R www-data:www-data /var/www/html

sudo mkdir -p /var/www/moodledata

sudo chown -R www-data:www-data /var/www/moodledata

1. Verify the Setup

Check the running containers: docker ps

Inspect volume permissions: docker exec -it <container\_id> /bin/bash

ls -la /var/www

ls -la /var/www/html

ls -la /var/www/moodledata

1. Restart Apache

Run: service apache2 restart

1. Access Moodle

Open a web browser and go to http://localhost:8080

Follow the Moodle installation wizard.

Use these database settings:

Database Type: MySQL

Database Host: db

Database Name: moodle

Database User: moodle

Database Password: moodle\_password

Port: 3306