Placement Empowerment Program

Cloud Computing and DevOps Centre

Automate Docker Container Management
Create a script that starts, stops, or removes
specific Docker containers based on user input.

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Objective

The goal of this PoC is to create a script that automates the management of Docker containers, allowing users to start, stop, or remove specific containers based on user input.

Prerequisites

- Install Docker on your system (Installation Guide)
- Basic understanding of Docker CLI commands (start, stop, rm)
- Basic knowledge of shell scripting

Step-by-Step Guide

Step 1: Create a Shell Script

1. Open a terminal and create a new script file:

    nano manage_containers.sh

2. Add the following script content:

```bash
#!/bin/bash
echo "Choose an option: start, stop, remove"
read action
echo "Enter container name:"
read container

case "$action" in
    start)
        docker start "$container"
        echo "$container started."
        ;;
    stop)
        docker stop "$container"
        echo "$container stopped."
        ;;
    remove)
        docker rm "$container"
        echo "$container removed."
        ;;
    *)
        echo "Invalid option. Use start, stop, or remove."
        ;;
esac
```

3. Save the file (CTRL + X, then Y, then ENTER).

Step 2: Grant Execute Permissions

Run the **following command to make the script executable:**

chmod +x manage_containers.sh

Step 3: Run the Script

Execute the script and manage your containers interactively:

./manage_containers.sh

Step 4: Verify the Actions

- To check running containers:

    docker ps

- To check all containers (including stopped ones):

    docker ps -a

References

- Docker CLI Guide