**Lab 5: Accepting User Inputs for Docker Operations**

Objective:*Enhance user input handling in Bash for Docker-related tasks.*

Tasks:

1. Write a script that accepts an image name as input.

2. The script then pulls and runs the Docker image.

Documentation:

- Handling user input in Bash scripts.

- Dynamically managing Docker containers based on user input

Prerequisites:

1- An AWS account with administrative access.

2- Docker Deep Dive Course

3- Bash Script Deep Dive Course

4- Complete Previous labs

Implementation Documentation:

**1. Introduction**

In this lab, we will create a Bash script that accepts user input for Docker-related tasks. Specifically, we will allow the user to provide the name of a Docker image, and the script will then pull and run that image.

**2. Script Implementation**

Here's the Bash script that accomplishes the tasks:

| #!/bin/bash  # Task 1: Accept an image name as input read -p "Enter the name of the Docker image: " image\_name  # Task 2: Pull and run the Docker image echo "Pulling the Docker image: $image\_name" docker pull $image\_name  echo "Running the Docker container based on $image\_name" docker run -it --rm $image\_name |
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**Explanation of the Script**

We start by using the read command to accept user input. The -p flag is used to provide a prompt message, asking the user to enter the name of the Docker image.

The user enters the image name, which is stored in the image\_name variable.

Next, we use docker pull to pull the specified Docker image. This command downloads the image from a Docker registry if it's not already available locally.

After pulling the image, we use docker run to run a container based on the provided image. The **-it** flags are used to make the container interactive, and **--rm** is used to automatically remove the container when it exits.

**3. Running the Script**

To run the script, follow these steps:

Save the script in a .sh file, e.g., **docker\_operations.sh.**

Make the script executable by running **chmod +x docker\_operations.sh.**

Execute the script by running **./docker\_operations.sh**.

When prompted, enter the name of the Docker image you want to pull and run.

**4. Conclusion**

In this lab, we have created a Bash script that accepts user input for Docker operations. This script enhances user interaction by allowing them to specify the Docker image they want to work with dynamically.

By following the steps provided in the documentation, you can easily use this script to pull and run Docker images of your choice, making Docker operations more user-friendly and flexible.