

# **Project Milestone**

# **IaaS: Virtualization and Containerization**

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**Video Link: https://drive.google.com/drive/folders/17EnSZpAIZPjl6oymphOvR-a6cpggRB8S?usp=sharing**

**Procedure:**

1. **What are docker images, container, and registry?**

* A container is a standard component that allows the user to package the application and its dependencies. Containers are portable, isolated and lightweight. Docker images are readable templates that include the instruction for creating a container. They are convenient because it provides a convenient way to package applications. A docker registry is a place that stores the docker images and the version that it's associated with.

1. **List the Docker commands used in the video with a brief description for each command and option.**

* In the video following are the commands that are being used

1. Docker build -t hello-world:1.0 - This command executes the docker file that contains the instruction to create a docker image.
2. Docker images - list all the docker images available on the system
3. Docker run hello-world:1.0 - This commands uses the docker image to make a docker container and execute the content specified in the docker file.
4. Docker ps - This command lists all the running containers in the system.It also shows the detailed version of the container.
5. Docker ps -a - This command lists all the containers in the system. It also shows the detailed version of the container.
6. Docker run -d hello-world:1.0- This command will execute the container in the background without displaying the output on the screen.
7. Docker logs [container id]- show the out of the conatine that is being executed in the background.
8. **At the end of the video, there are two running containers, what commands can be used to stop and delete those two containers?**

* The command used for stopping and deleting the containers are as follows
  + Stop: docker container stop [container id]
  + Delete: docker container rm [container id]

**8. What’s a multi-container Docker application?**

* A multi-container docker application is an application that is able to link multiple docker containers with the help of docker network protocol.

**11. List the new docker commands used in the video with a brief description for each command and option.**