

Lab1

Due Date: February 16

Goal: Familiarize students to **Docker** commands and to make them run cross host link containers.

Description: Lab 1 is to familiarize students with basic Docker commands and Docker hub. Students will perform below listed tasks as a part of lab1.

- Account and repository creation in Docker Hub.
- Downloading an image from Docker hub.
- Creating new images and adding layers to a container.
- Starting and stopping a new container.
- Running container both interactively and as a daemon.
- Uploading an image to the Docker hub.

Lab Assignment/Submission: Lab submission would be screenshot of these commands and using these commands to run two cross host link container one with nodejs/(or)Java app and the other with mongodb in it. The nodejs/Java app would fetch data from mongodb.

This is a group task and students would have to group themselves with each group having maximum size of two.

Each student of the group has to run his/her Nodejs app which would fetch data from mongo running in other student's machine.

Nodejs/Java App: A simple web app fetching data from other student's container. This data could be anything like other student name and other details.

Mongodb: Student would store data as to what they want to display and should be consistent across the group.

Note: Link to base image would be shared.

Submission: Take screenshots of project and explain each step in word document. Submit one word document to canvas.