DOCKER CASE STUDY

SYSTEM REQUIRMENTS :

1) Dynamic Allocation of Linux systems for users.
2) Each user should have independent Linux System.
3) Specific training environment should be created in Container.
4) User should not allow to access other containers/images.
5) User should not allow to access docker command.
6) Monitor participants containers.
7) Debug/live demo for the participants if they have any doubts/bug in running applications.
8) Automate container creation and deletion.

CREATING CONTAINERS :

1) Write a script such that it reads input from a file and create containers with names read from input.

Create_Container.sh

```
echo -n "Enter your username "
read name
while read user
    do
      docker create -it --name $user <docker-image> /bin/bash
    done < $file
```

Here we read user_name from file and create a container with the image you want to run.

2) The user can then start using the allocated container by running the “Use_Container.sh” script.

Use_Container.sh

```
echo -n "Enter your username "
read name
docker start $name
docker attach $name
```

Monitoring The Containers:

To monitor the activities of a particular user use the shell script “Monitor_Container.sh”

Monitor_Container.sh

```
echo -n “Enter name of user to be monitored ”
read name
docker logs -f $name
```

Deleting The Containers:

To delete the existing user container run the following script.

Delete_Container.sh

```
echo -n “ Enter name of user to be deleted “
read name
docker rm $name
```

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