# **Product Recognition App Deployment process:**

## **Pre-requisite:**

* Install docker desktop in your local machine
* Create an account in https://hub.docker.com/
* Install git bash or putty (as linux IDE) in your local machine
* Install docker in your cloud/remote server.

### **I. Building image, container and pushing to hub:**

1. Using git bash or putty, go to the path where app\_codes are stored. Ensure that the following files are present:

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1. To build the latest docker image, execute this command:

**docker build -t <repo\_name>:tag .**

Example: **docker build -t madserrano/prodrecog:latest .**

1. [Optional] To run the latest image, execute this command:

**docker run -p 8501:8501 <repo\_name>:tag**

Example: **docker run -p 8501:8501 madserrano/prodrecog:latest**

1. Check the list of images by executing this command: **docker images**
2. Tag the latest image file that you can see from the list by executing this command:

**docker tag <image id> <repo\_name>:tag**

Example:

Text

Description automatically generated

Command: **docker tag 613b32834295 madserrano/prodrecog:latest**

1. Login to docker hub by executing this command: **docker login docker.io**
2. Push the latest image to docker hub by executing this command:

**docker push <repo\_name>:tag**

Example: **docker push madserrano/prodrecog:latest**

## **II. Deployment to cloud**

1. Connect to the cloud (linux) server using pem file. In git bash or putty execute this command:

**ssh -i <pem\_file> userid@IP\_address**

Example: **ssh -i madserrano\_key.pem madserrano/40.117.180.203**

1. Ensure that docker is properly installed and set-up. Check the running images, stop, and remove the existing image by executing these commands:

**sudo docker images**

**sudo docker ps**

**sudo docker stop container\_id**

**sudo docker image rm image\_id -f**

1. Build the prodrecog image by pulling the latest image from the hub: **docker pull <repo\_name>**

Example: **docker pull madserrano/prodrecog**

1. Once confirmed that docker image is pulled properly, create a new tmux session by executing this command: **tmux new -s <session\_name>**

Example: **tmux new -s prodrecog**

1. From tmux window, run the docker image using 8501 port: **docker run -p 8501:8501 <app\_name>**

Example: **docker run -p 8501:8501 madserrano/prodrecog**

At this point, your cloud server must be able to show your deployed app by accessing:

http://<ip\_address or hotsname>:8501

Example: <http://productlookapp.eastus.cloudapp.azure.com:8501/>