Setting up the docker things

1. Installed docker container runtime
2. created Dockerfile using nginx and copy
3. docker build -t
4. docker run --name surveyformc -d -p 8080:80 surveyform
5. docker login hemu1999
6. docker tag surveyform hemu1999/surveyform

Setting up the jenkins on EC2

- Create t2.micro on AWS, allowing HTTPs and saving the key
- https://www.jenkins.io/doc/tutorials/tutorial-for-installing-jenkins-on-AWS/
- Our jenkins is available at http://23.22.80.96:8080/

Github

- Create an ssh key pair locally
- add the public key to the github sshkey in the repo settings
- add the private key as the credentials on jenkins
- create a webhook with the payload http://23.22.80.96:8080/web-hook/
- create it

Jenkins Setup

- Create a job
- Select free style project
- Give a description
- choose github project
- add the github url
- choose git as SCM
- add repo url
- choose credentials
- make branch to blank
- choose github hook trigger
- add build steps
  adding..

To install docker on jenkins node: https://docs.aws.amazon.com/serverless-application-model/latest/developerguide/install-docker.html
sudo yum update -y
sudo yum install -y yum-utils device-mapper-persistent-data lvm2
sudo yum-config-manager --add-repo https://download.docker.com/linux/amazon/docker-ce.repo
sudo yum install -y docker-ce

sudo systemctl start docker
sudo systemctl enable docker
giving jenkins user permissions using: sudo usermod -aG docker $USER
sudo usermod -aG docker jenkins

Installing rancher

- create a t2.medium instance with 24gb of ebs allowing HTTP & HTTPS with AMI LINUX 2
- `yum update -y` to update the existing packages
- `yum install docker -y` to install docker
- `systemctl enable docker` to enable the system link with docker
- `systemctl start docker` to start the docker service in backend
- `docker run -d --restart=unless-stopped -p 80:80 -p 443:443 --privileged rancher/rancher:stable` use this command to start a rancher container.
- Then go to `ec2-ipaddress:80` to see the rancher dashboard
- run the `docker logs container-id 2>&1 | grep "Bootstrap Password:"` gives the current password
- use that to create your own new password.
- In the dashboard, click `create`.
- Scroll down and choose `custom` and then click on `create`.
- Then choose the curl command presented on screen, enable the insecure flag.
- copy this command to paste it in the `k8 ec2 machine` to make the cluster on `ec2` manageable with rancher.

Setting up the k8 ec2

- create a t2.medium instance with 24gb of ebs allowing HTTP & HTTPS with ubuntu
- `sudo apt-get update -y` to update current packages
- `sudo apt-get install docker.io -y` to install docker service, it should automatically create system link, if not follow above systemcl commands to start docker service in the backend.
- paste the rancher agent curl command and click enter. this will make the cluster accessible via rancher.
- Now go to rancher dashboard and start deploying your yaml files.