## Setting Up Jenkins Pipeline to Deploy Docker Swarm..

## Description

## **Project objective:**

You have to develop an environment for Docker networking.

- 1. Set Up Docker
- Install Docker on all the hosts
- Initialize Docker.
- 2. Set Up Jenkins:
  - Install Jenkins on a separate server.
  - Install necessary plugins like Git plugin, Docker plugin, Pipeline plugin, etc.
- 3. Configure Jenkins for Docker and Git:
  - Set up credentials in Jenkins for accessing Docker and Git repositories.
  - Configure Jenkins to communicate with your Docker.
- 4. Create a Jenkins Pipeline:
  - -write a pipeline script to build and push docker image to the docker hub
- 5. Commit and Push Jenkinsfile:
  - Commit the 'Jenkinsfile' to your Git repository.
- 6. Set Up Webhooks:
  - In your GitHub repository, go to Settings > Webhooks > Add webhook.
  - Add the Jenkins URL followed by `/github-webhook/` as the Payload URL.
- 7. Trigger the Pipeline:

- Make a change in your repository and push it. This should trigger the Jenkins pipeline.
  8. Monitoring and Maintenance:
   Monitor the pipeline runs and debug any issues that may arise.
- 9. Push the Docker image to the docker hub
- 10. Configure EC2 instance to run the created docker image in the Jenkins.

Github link: https://github.com/navyamanju/Docker-Swarn.git