Set up a pipeline (Github actions/Gitlab runner/ Jenkins or any open source tool) to build, test, create a docker image, publish and deploy to k8s. Use the application present in this public repo <https://github.com/apiwizlabs/wizdesk>.

# Steps

## Prerequisites

* 1. Forked the repository from <https://github.com/apiwizlabs/wizdesk> to <https://github.com/prathi2n/wizdesk>
  2. Install Jenkins
  3. Configure npm
  4. Plugins (Docker, Kubernetes, Git, Pipeline, etc.).
  5. Docker and Kubernetes configured and accessible from Jenkins.
  6. Kubernetes cluster with necessary permissions to deploy applications.
  7. A Docker registry to push images

## Set Up:

* 1. Create a Jenkinsfile in the root of repository

Refer: /cicd/4a/Jenkinsfile in the git repository

* 1. Create Dockerfile in the root of repository

Refer: /cicd/4a/ Dockerfile in the git repository

* 1. Create Kubernetes Deployment and Service Files

Refer:

/cicd/4a/ k8s/deployment.yaml

/cicd/4a/ k8s/service.yaml

## Pipeline Configuration in Jenkins:

* 1. Set up all the credentials (Git, Kubernetes, Docker)
  2. Configure the pipeline

## Build Pipeline

Jenkins console log is generated. Please refer /cicd/4a/Jenkins\_Console