a. install gitlab runner & register the same

Project -> settings -> CICD -> Runners -> Specific Runners

Ref: https://docs.gitlab.com/runner/install/linux-manually.html or https://docs.gitlab.com/runner/install/linux-repository.html

- b. protected branch Project -> settings -> Repository ->
- c. maintainer access, add deploy key (ssh rsa public key from machine)

Project -> settings -> Repository -> deploy key

https://docs.gitlab.com/ee/ci/ssh_keys/index.html

https://docs.gitlab.com/ee/ssh/index.html#generate-an-ssh-key-pair

Add to EC2 ~/.ssh/authorized_keys (public key) and add the same to gitlab SSH keys in profile settings / preferences to connect to gitlab.

Add generated private key to ssh agent

eval \$(ssh-agent) ssh-add ~/.ssh/id_rsa

ssh -T git@gitlab.com

d. sudo gitlab-runner register

register: https://docs.gitlab.com/runner/register/index.html

repo domain, token, tags- **add branch or tags**, runner name, executor - docker, docker image ruby:2.6

- f. sudo gitlab-runner start
- g. check the new runner with green clr sts in repo settings ..
- i. create CICD config file & add relevant cmds *
- h. add env variables by referring below **
- j. Install docker https://docs.docker.com/engine/install/ubuntu/ (to be used by runner to execute the pipeline) and disable shared runners for free gitlab account.
 - * .gitlab-ci.yml

web - react build

- 1. SSH connection
- 2. dir (repo) navigation
- 3. git stash, checkout & pull
- 4. npm i
- 5. build script

Server - node pm2

- 1-4 above
- 5. pm2 restart * / pm2 eco file

^{**} env variables - CI_BRANCH, CI=false in start or build script (frontend), DEPLOY_SERVER - ip or domain, REPO_DIR_PATH - absolute path, SSH_PRIVATE_KEY (ssh rsa key which is added to ec2 ssh/ authorized keys)