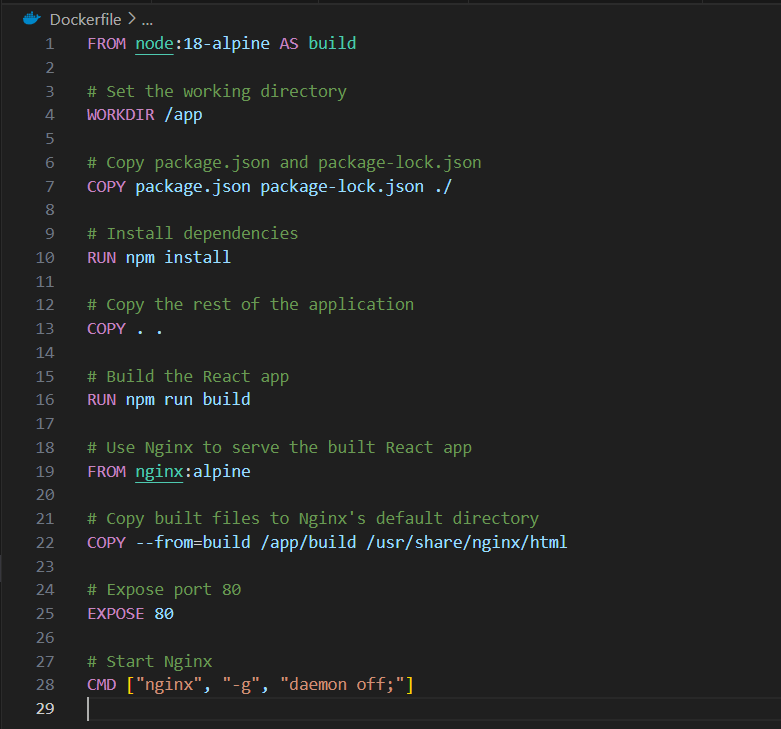
**Assignment 3**

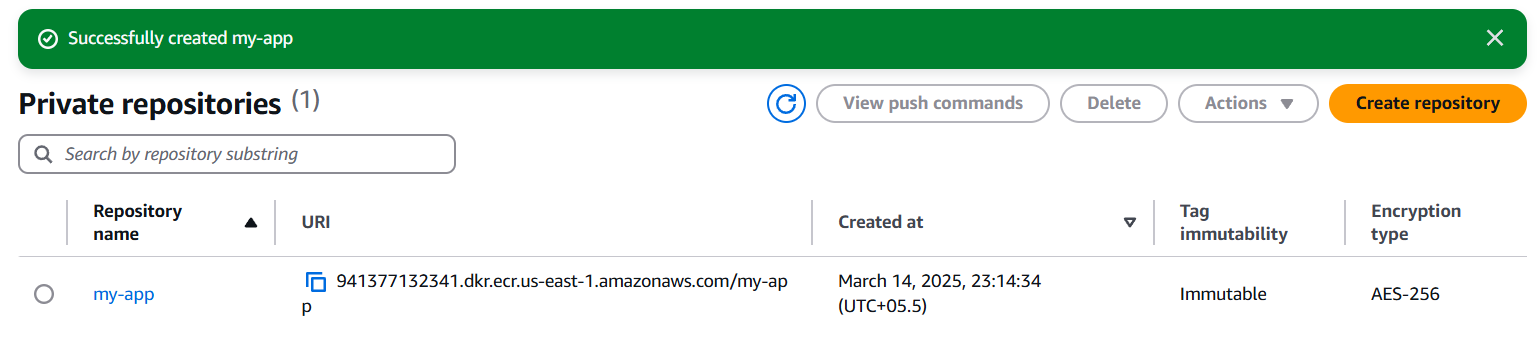
Create a Dockerfile:



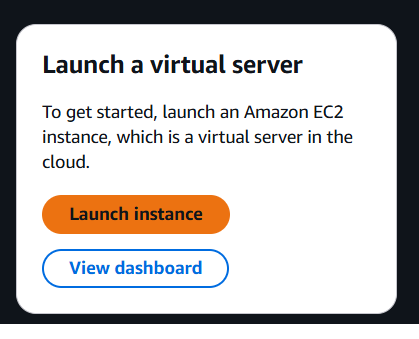
Create a docker-compose.yaml file:

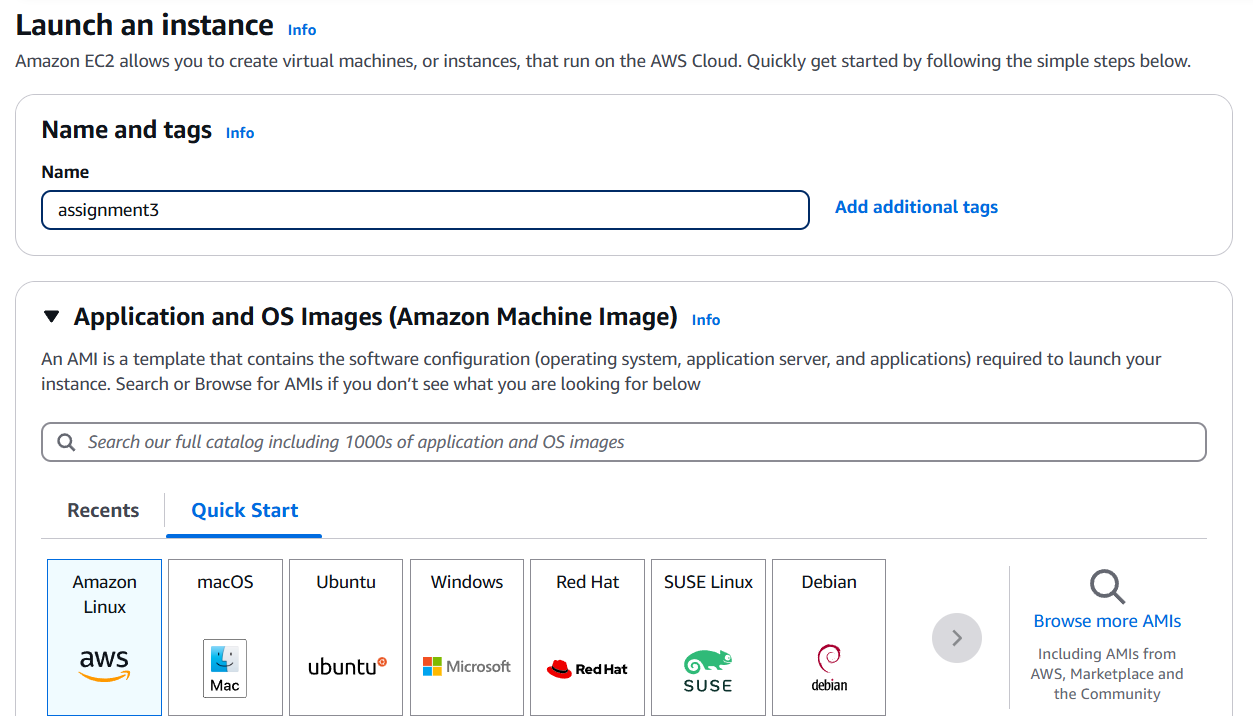


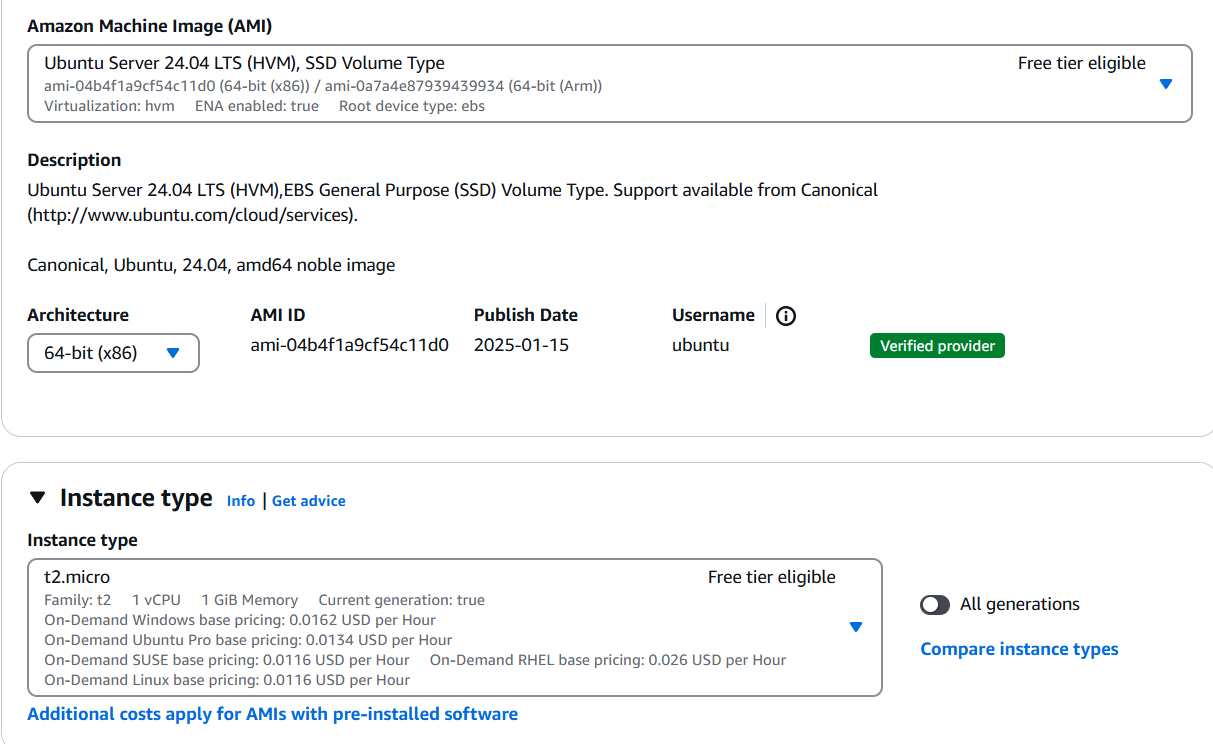
Create an AWS ECR Repository:



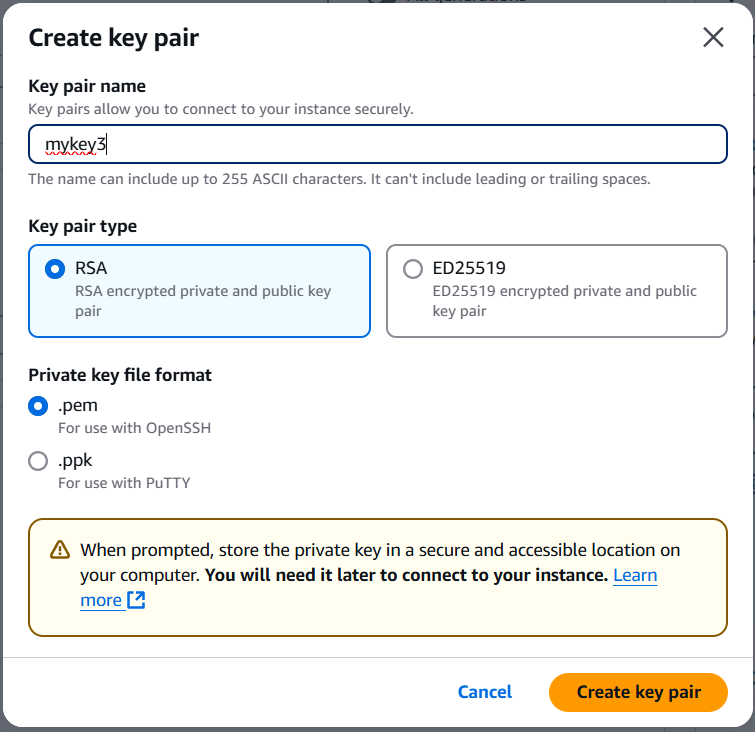
Set Up an AWS EC2 Instance:

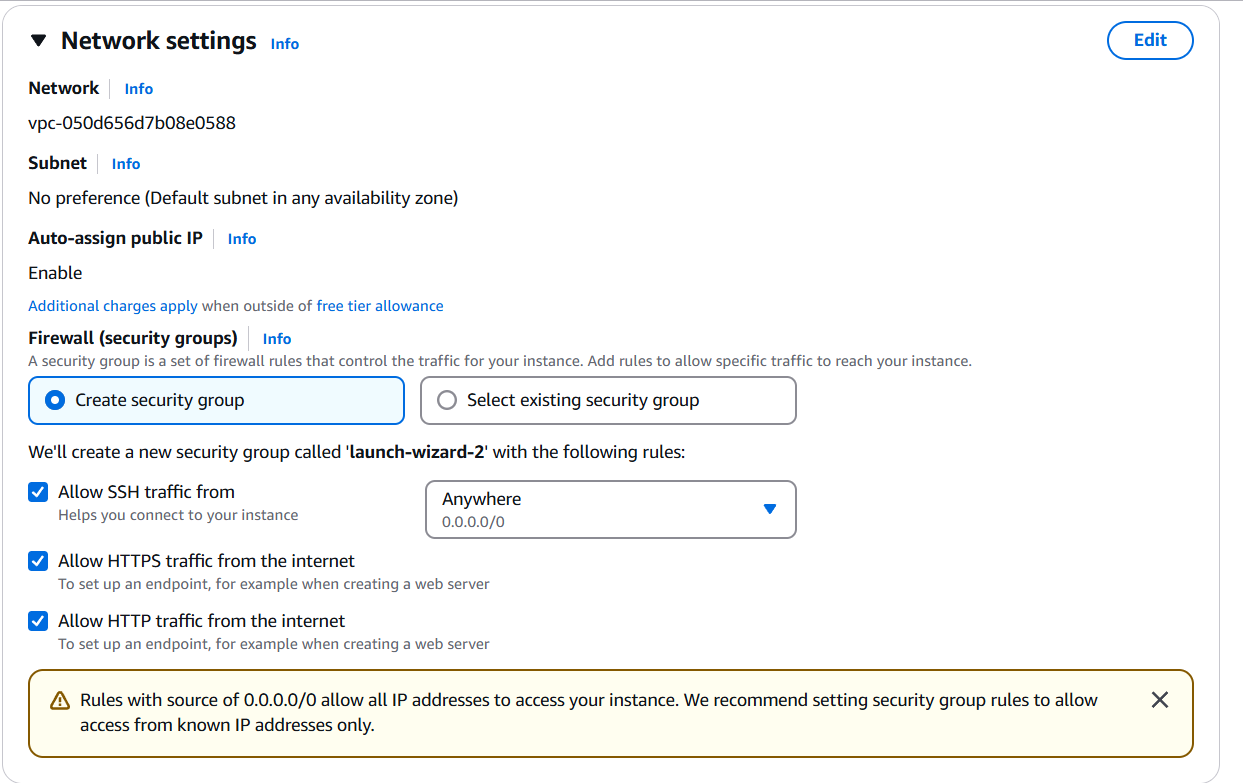


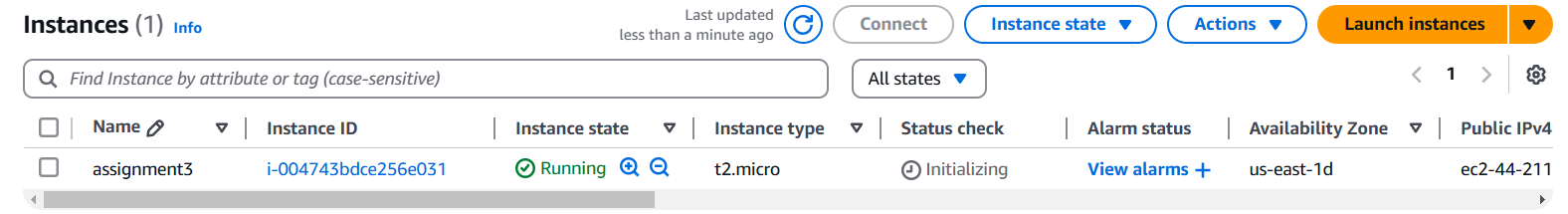


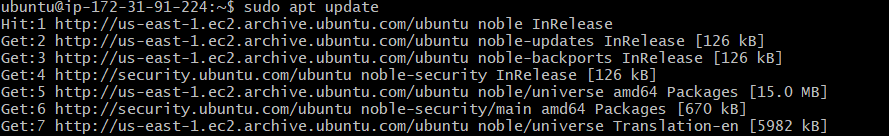


Create a key pair:

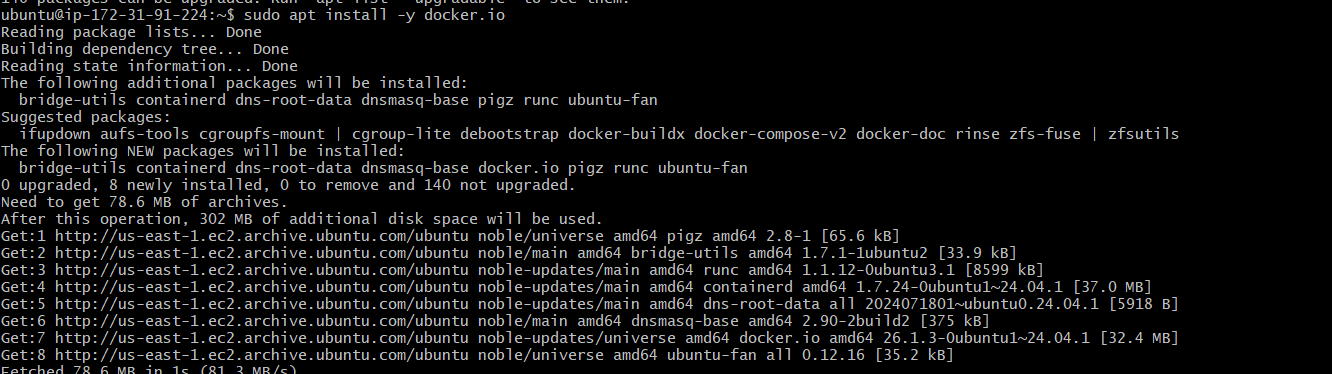




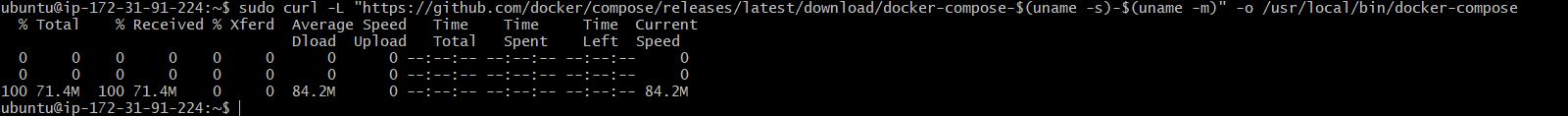




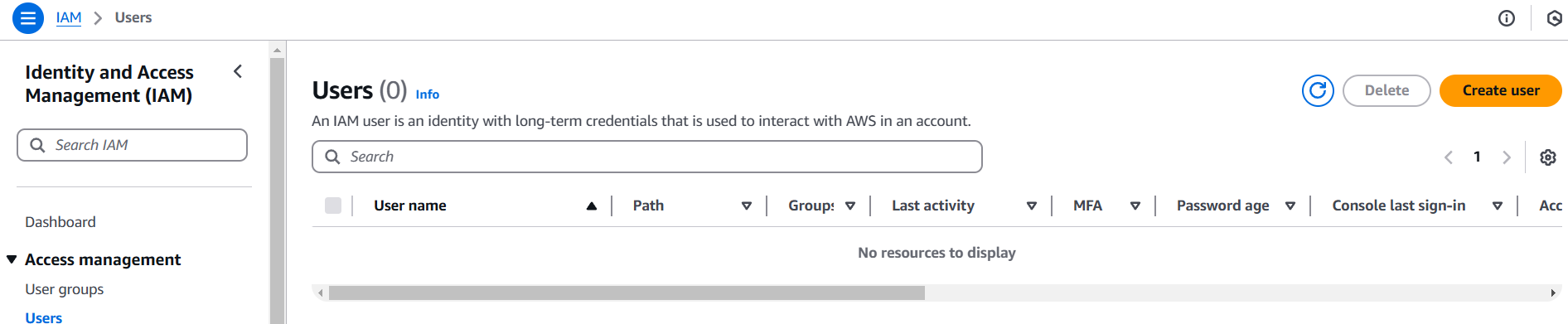
Install docker in the aws instance:

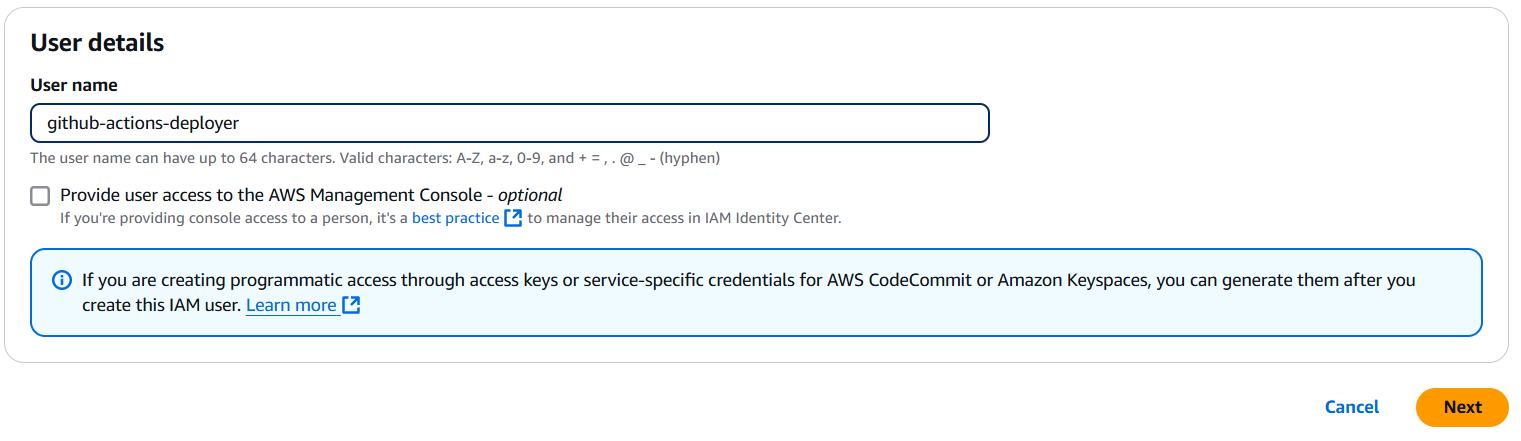


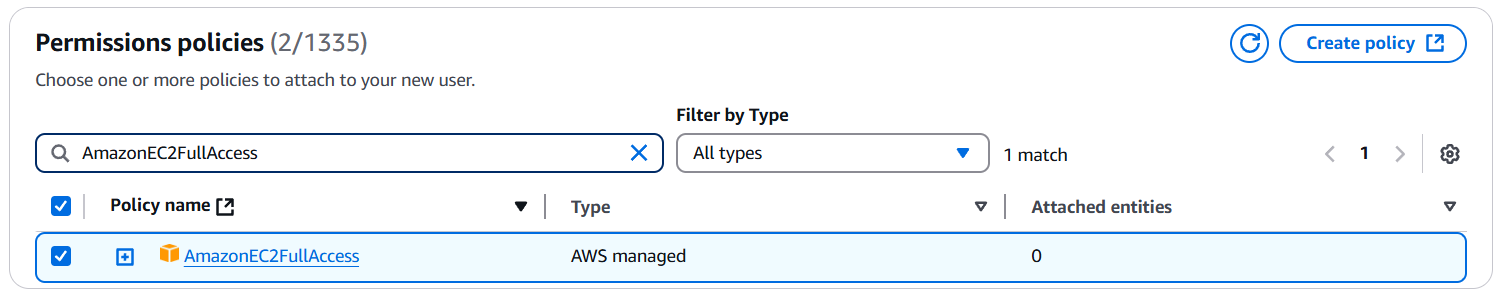


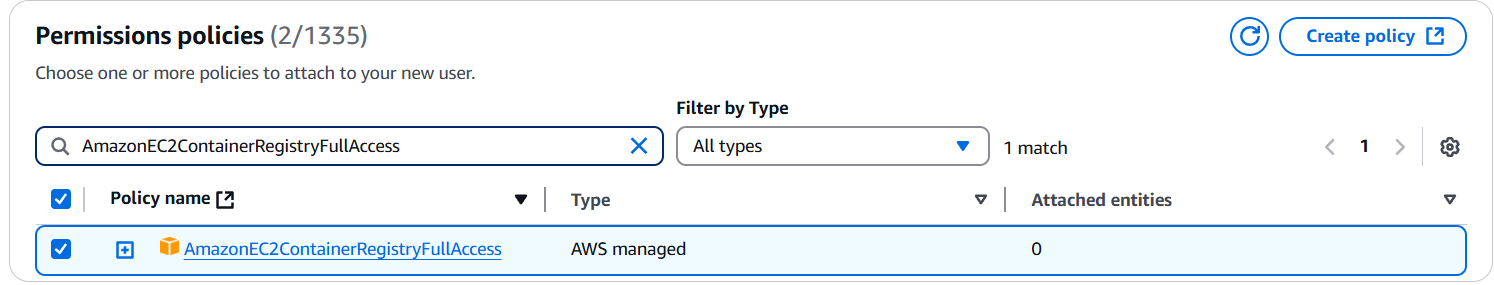


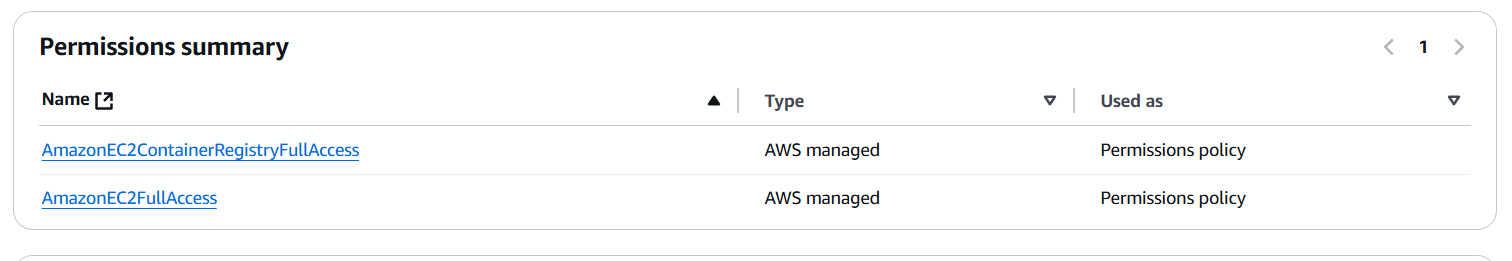
Configure IAM Permissions:

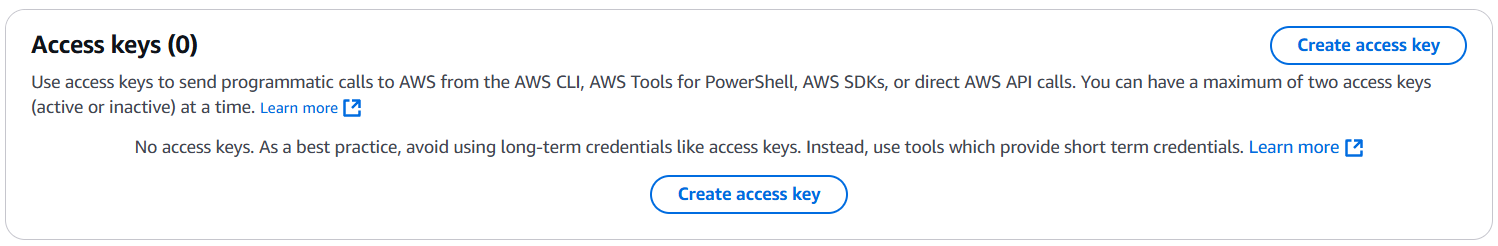


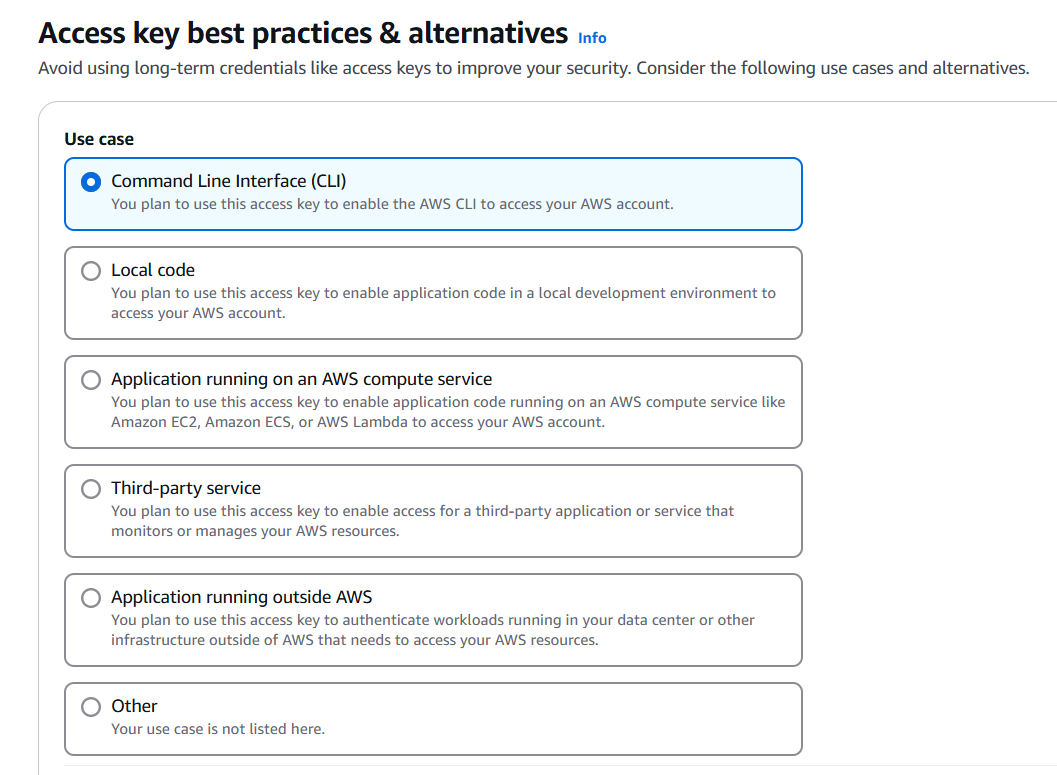


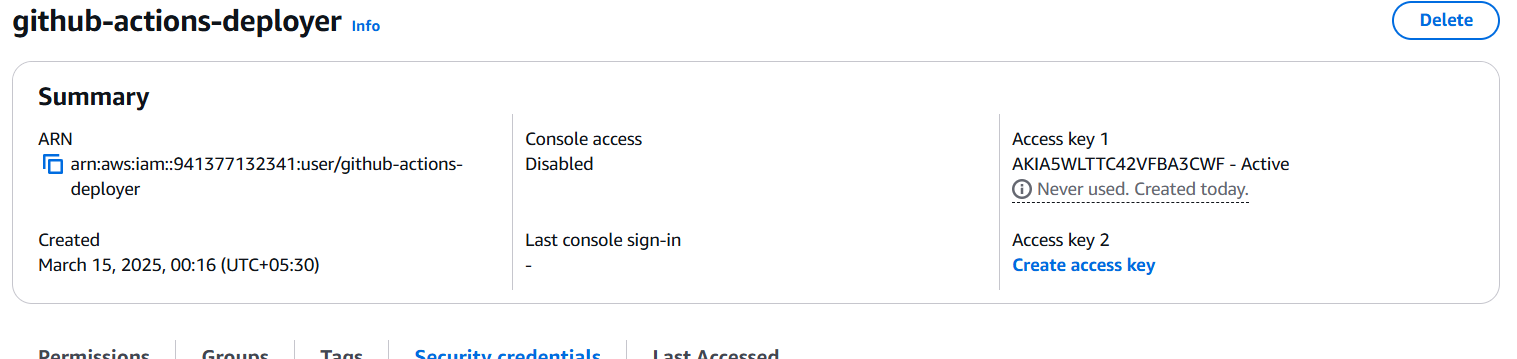












Store AWS Credentials in GitHub Secrets:

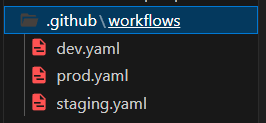
Add the following secrets:

* AWS\_ACCESS\_KEY\_ID
* AWS\_SECRET\_ACCESS\_KEY
* AWS\_REGION (e.g., us-east-1)
* ECR\_REPOSITORY (your ECR repo URI)
* EC2\_HOST (your EC2 public IP)
* EC2\_USER (usually ubuntu)
* EC2\_SSH\_KEY (your private SSH key, stored as a multi-line value)
* AWS\_ACCOUNT\_ID

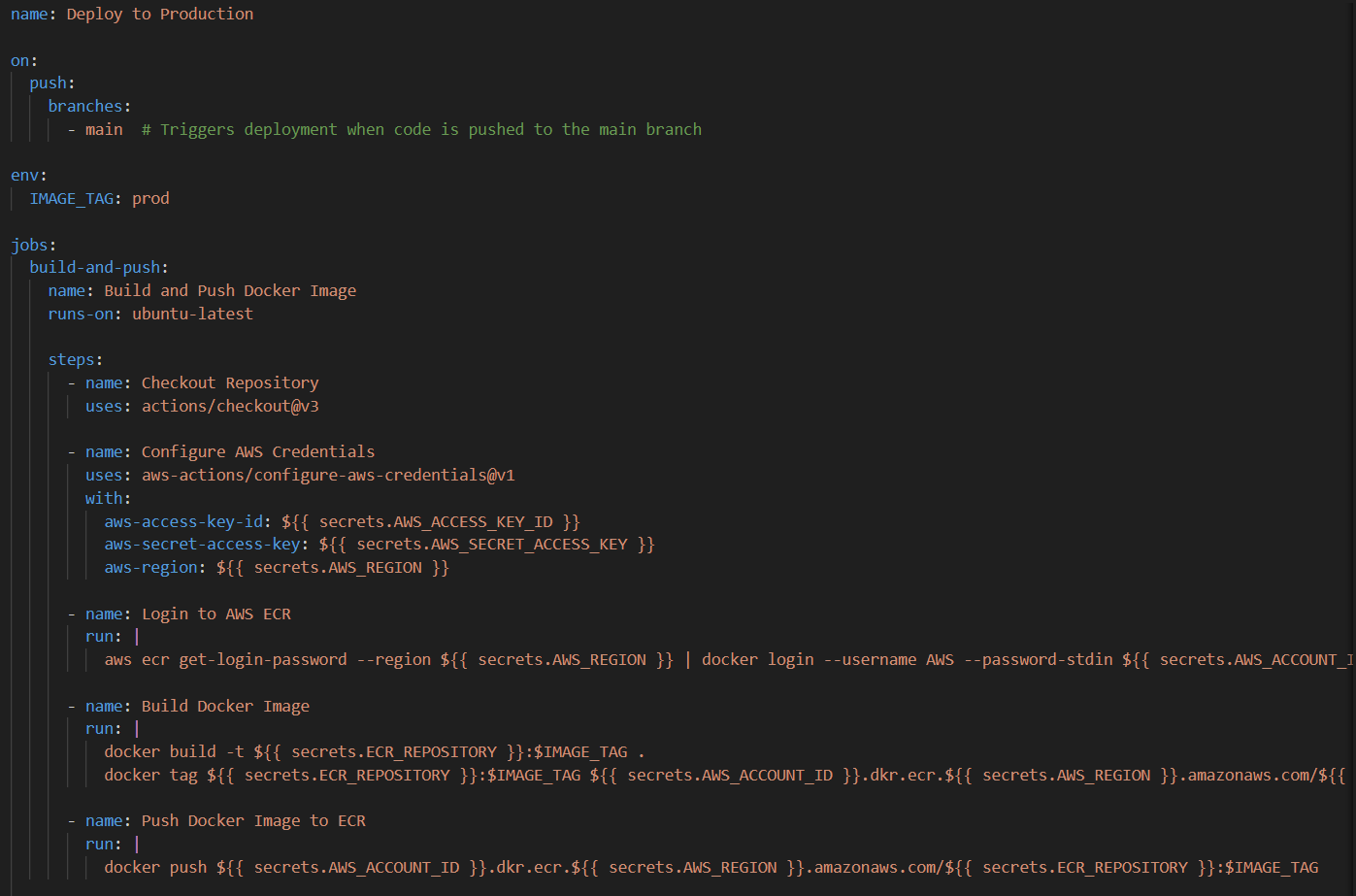


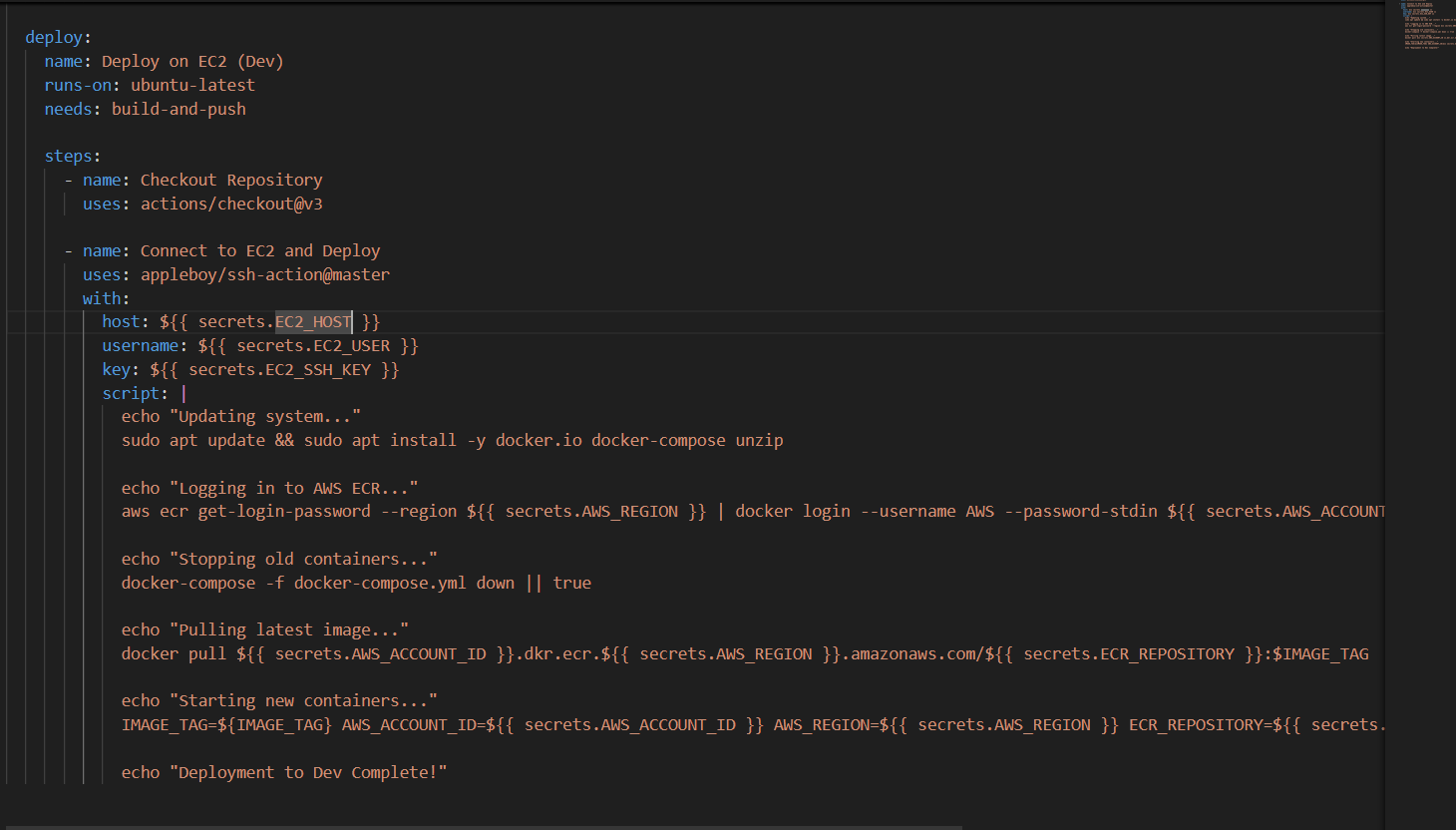
Prepare Your GitHub Repository:

* dev.yaml
* staging.yaml
* prod.yaml

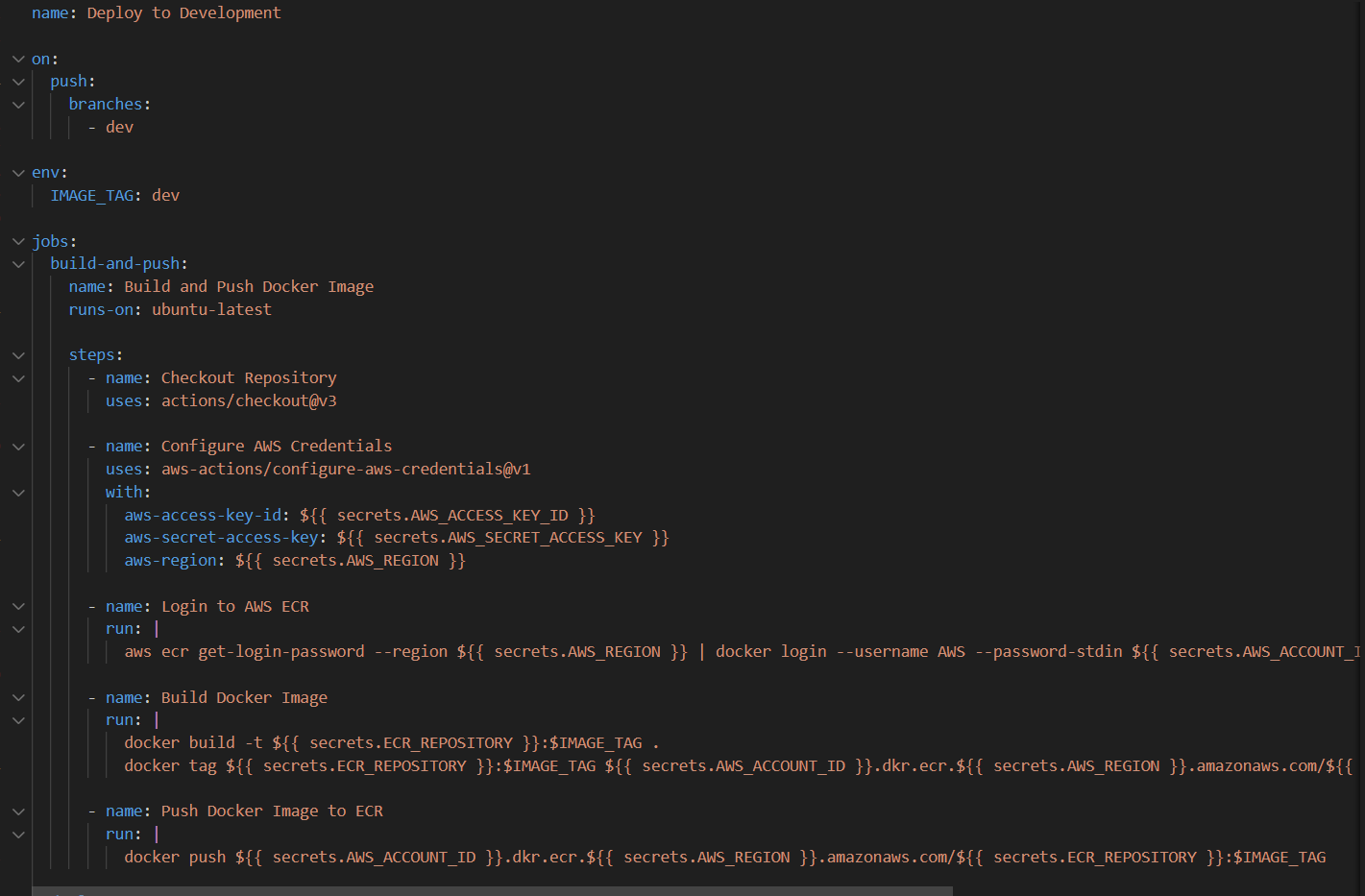


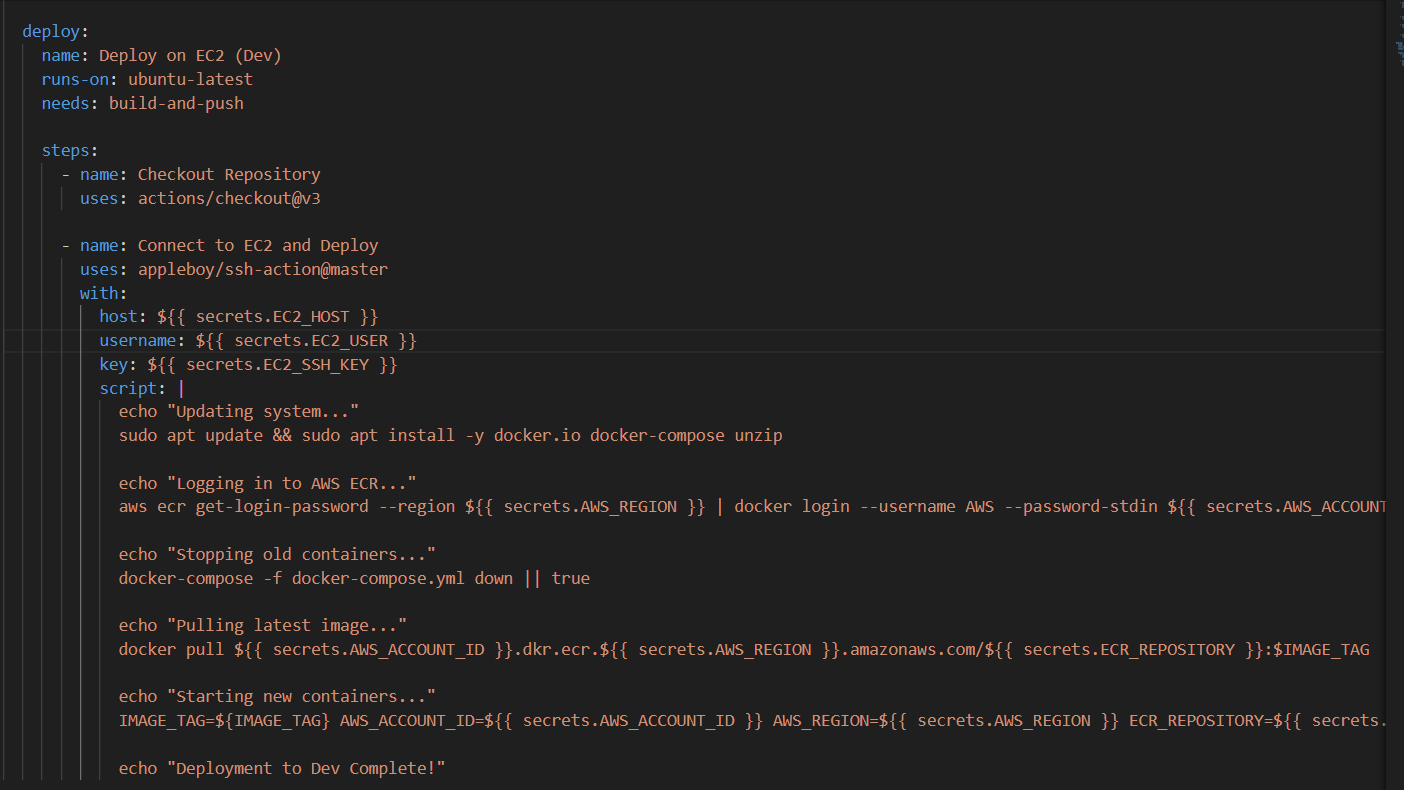
Prod.yaml file:



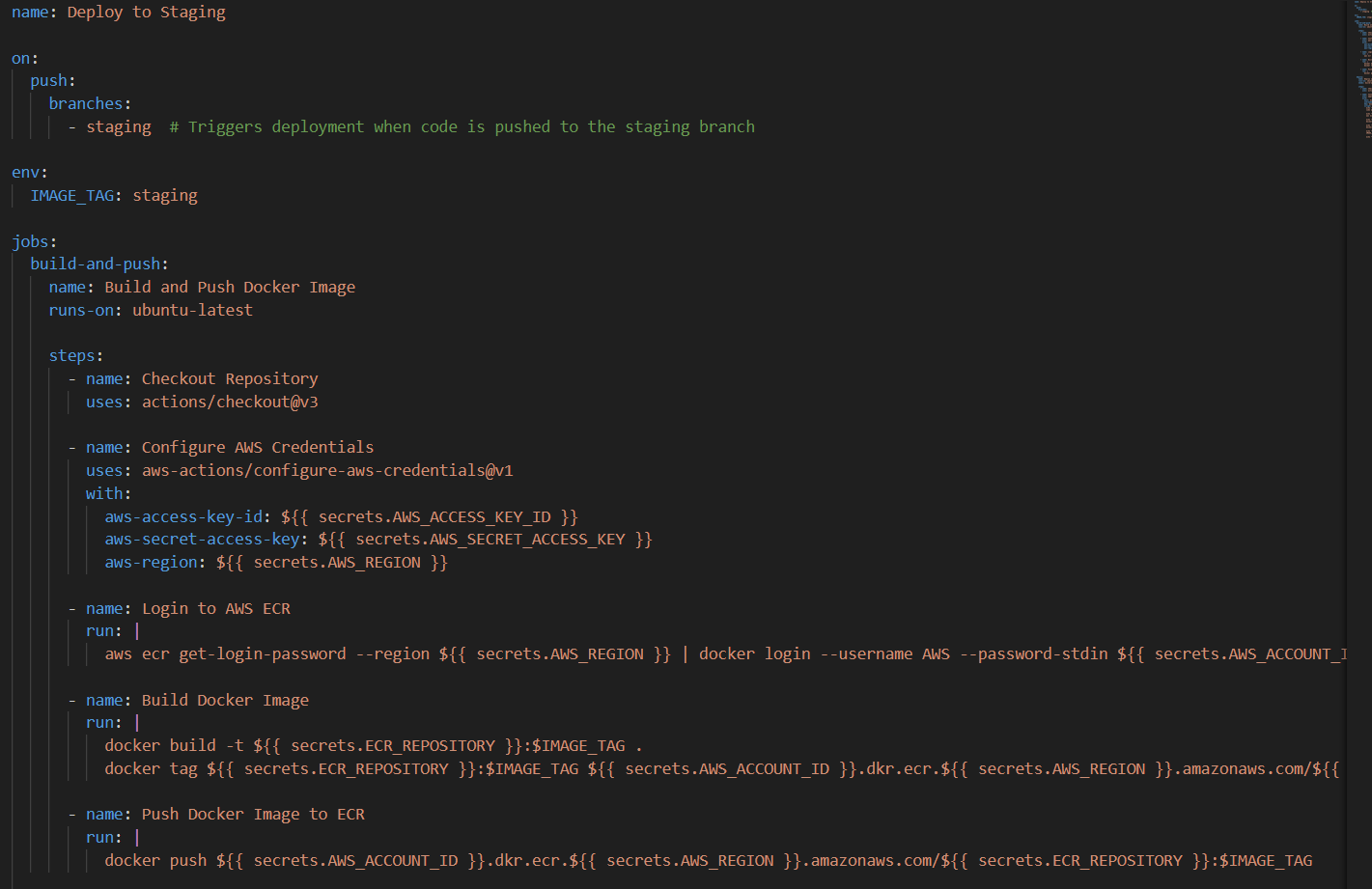


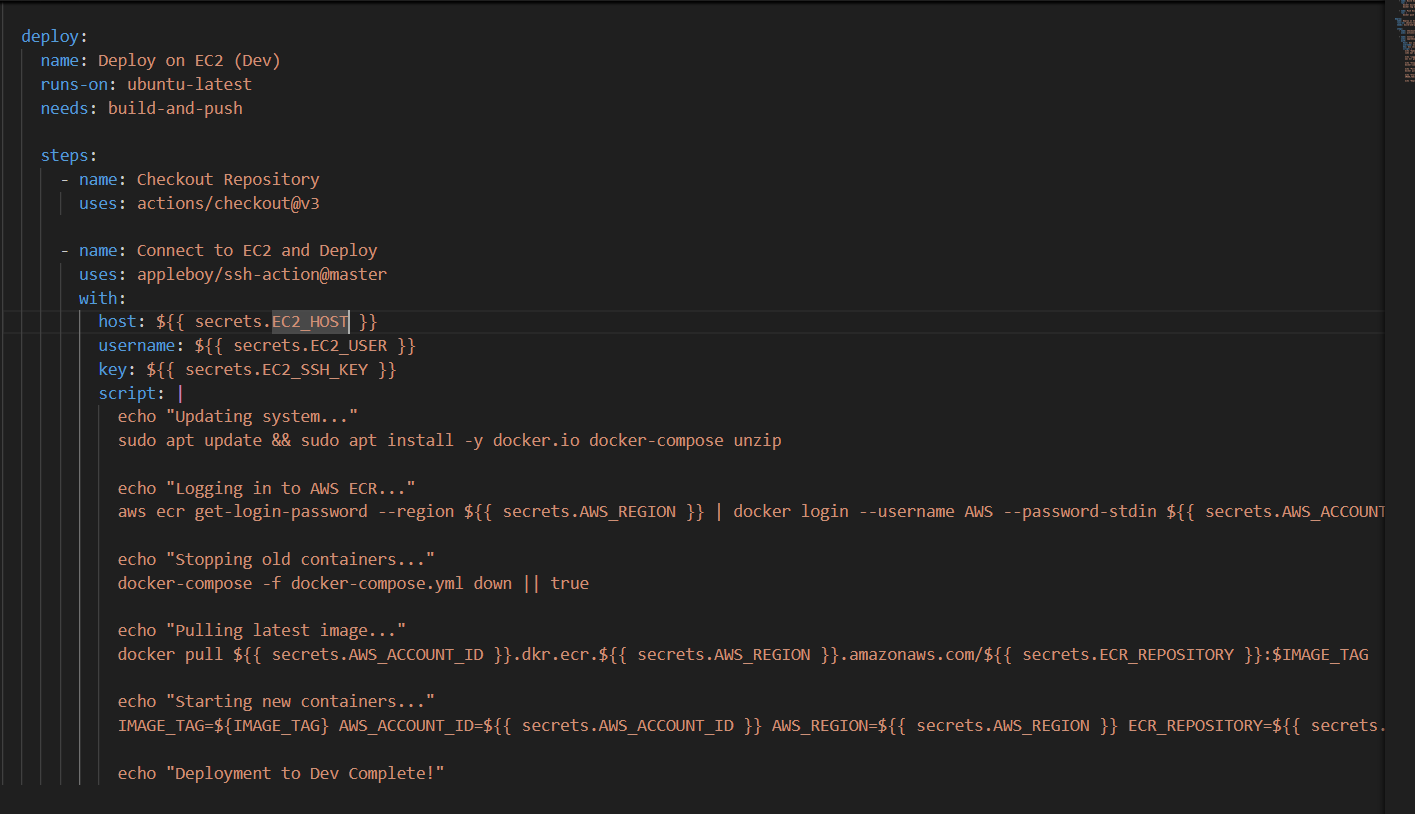
dev.yaml file:





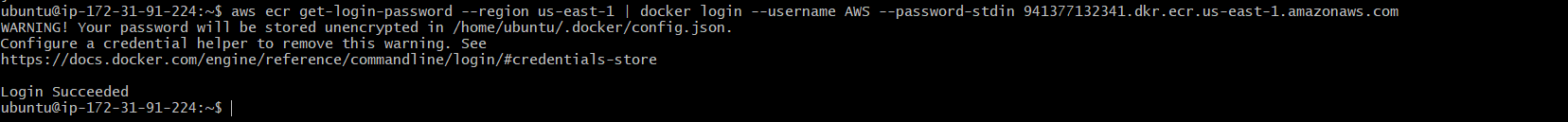
staging.yaml file:



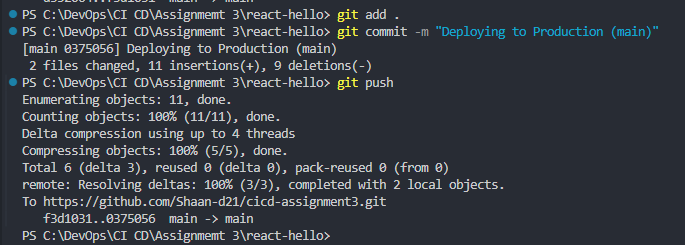


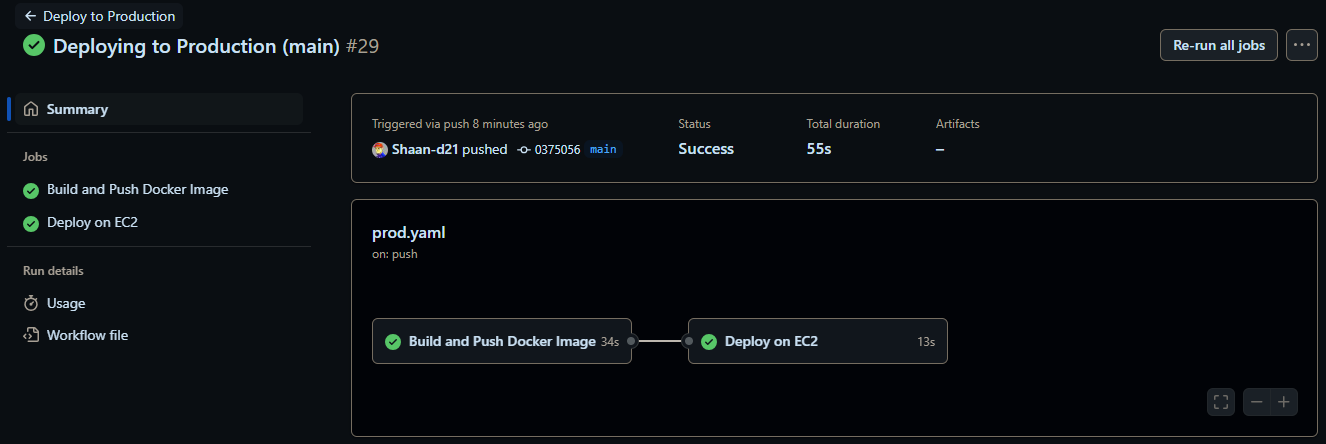
* Push to dev branch → dev.yaml runs → Deploys dev version
* Push to staging branch → staging.yaml runs → Deploys staging version
* Push to main branch → prod.yaml runs → Deploys prod version

Login to ecr:

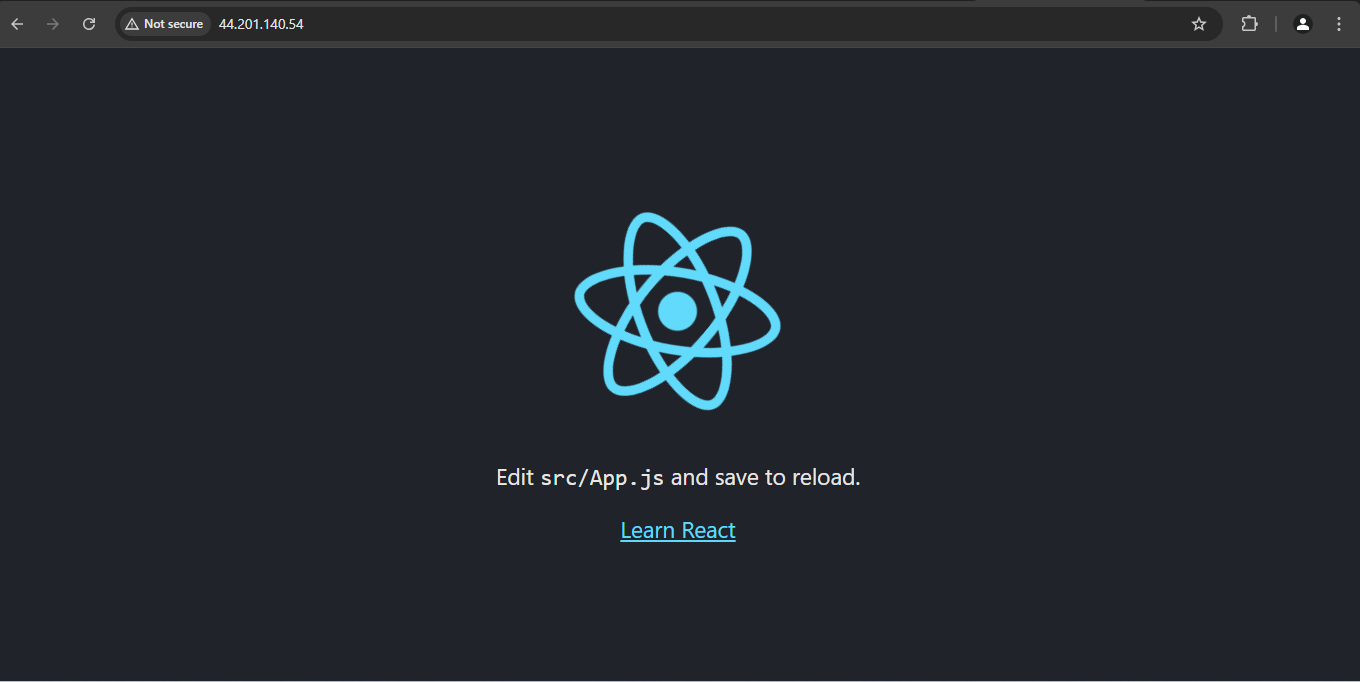


Push code to the main branch

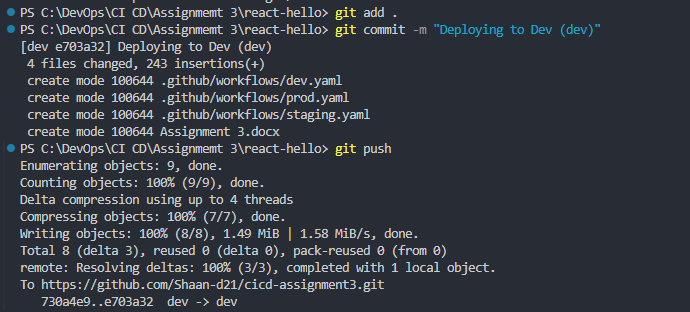


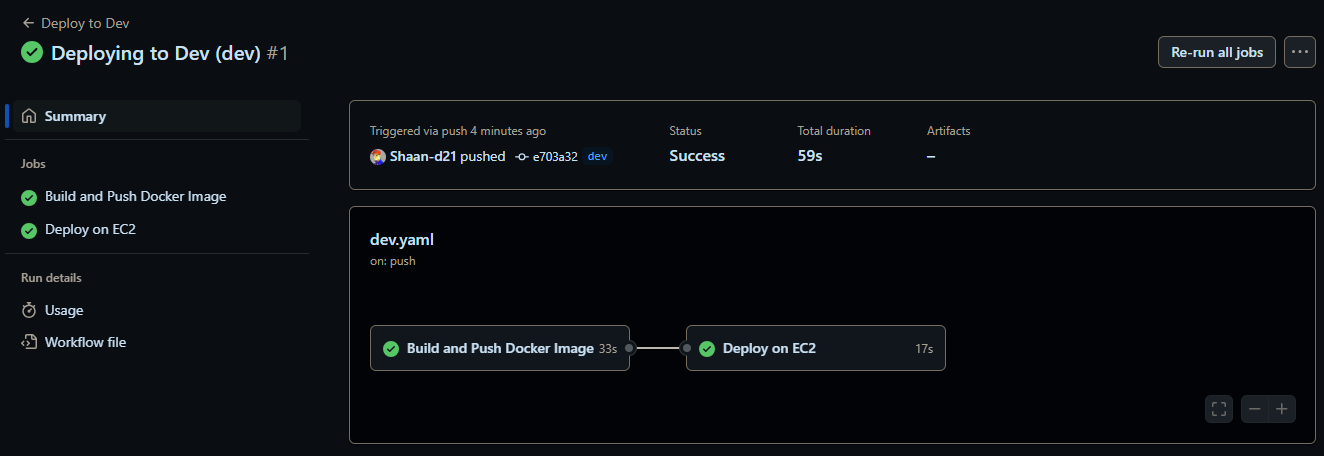


React app is accessible at: http://44.201.140.54/

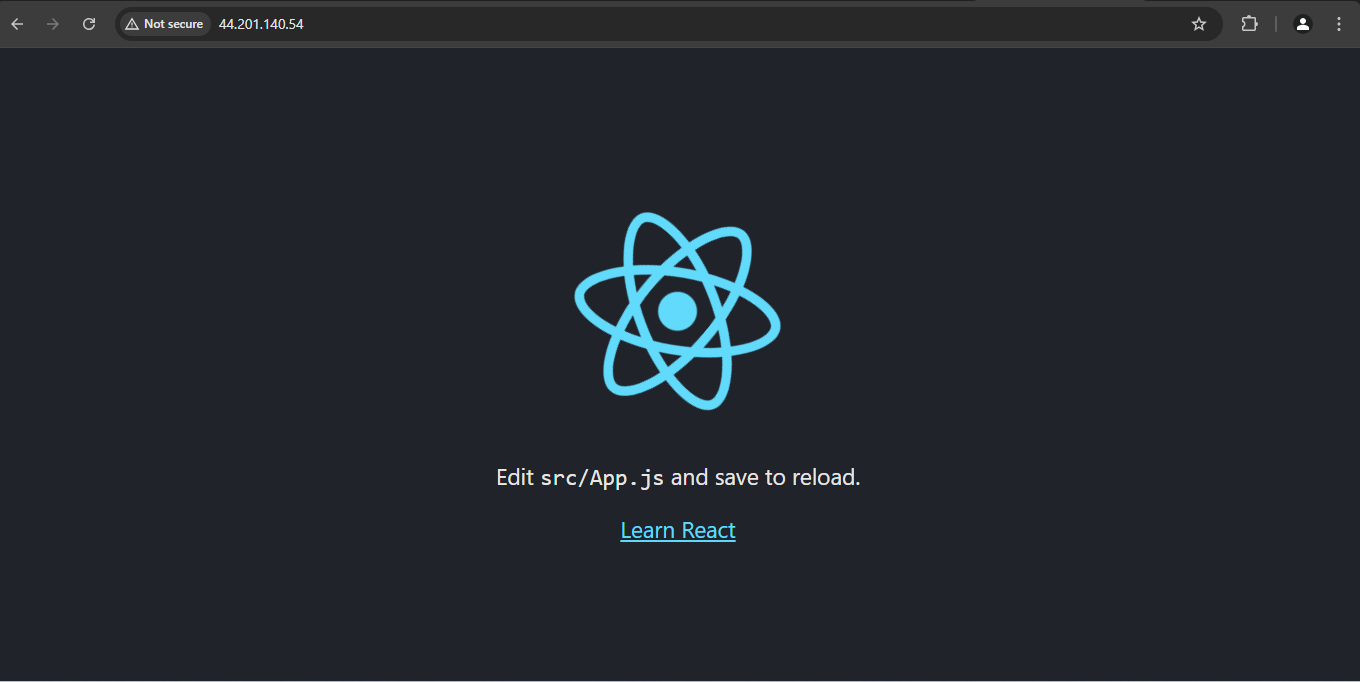


Push code to the dev branch:

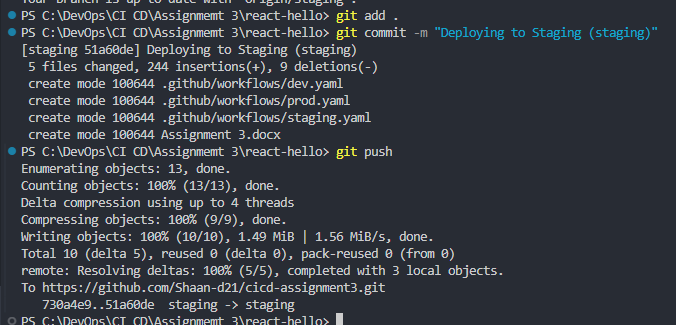


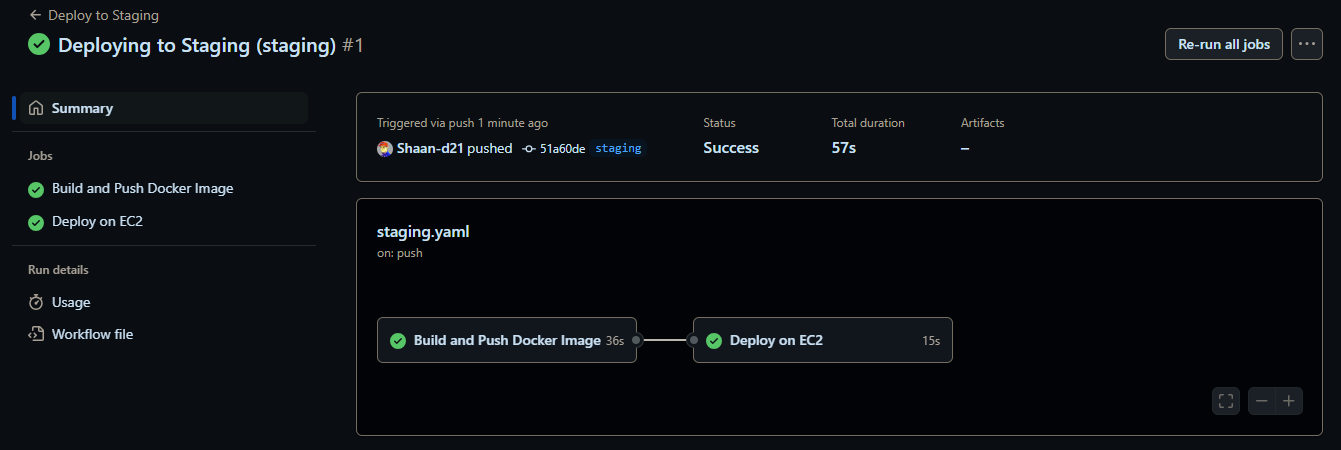


React app is accessible at: http://44.201.140.54/

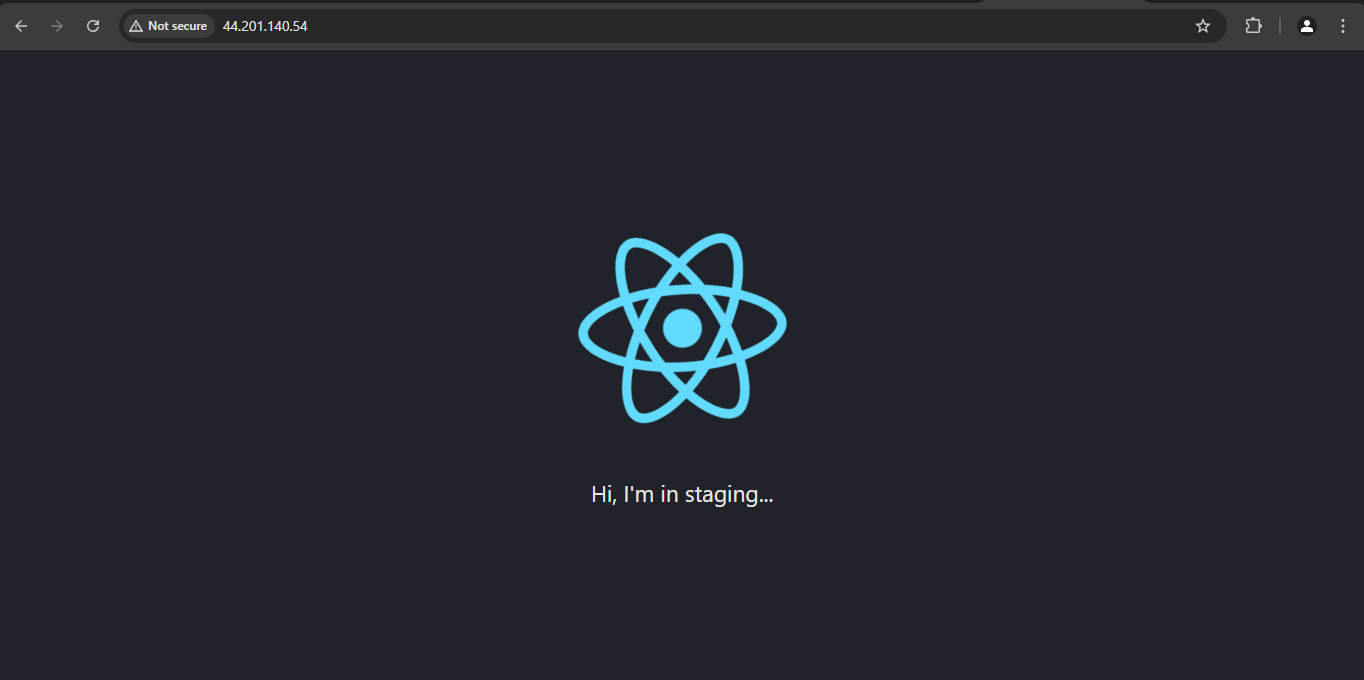


Push code to the staging branch:

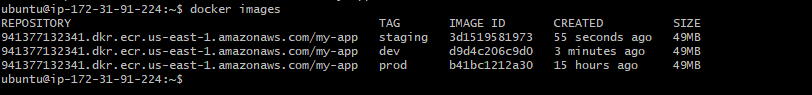




React app is accessible at: http://44.201.140.54/



Images created with respective tags:



Container is running:

