AWS CICD Deployment with Github Actions
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1. Login to AWS console.

2. Create IAM user for deployment
   a. With specific access:
      i. EC2 access : It is virtual machine
      ii. ECR : Elastic Container Registry to save your docker image in aws
   b. Description: About the deployment
      1. Build Docker image of the source code
      2. Push your docker image to ECR
      3. Launch Your EC2
      4. Pull Your image from ECR in EC2
      5. Launch your docker image to EC2
   c. Policy:
      i. AmazonEC2ContainerRegistryFullAccess
      ii. AmazonEC2FullAccess

3. Create ECR repo to store/save docker image
   a. Save the URI: <12-digit-code>.dkr.ecr.us-east-1.amaxonaws.com/<repo-name>

4. Create EC2 machine (Ubuntu)

5. Open EC2 and Install docker in EC2 Machine:
   a. Optional:
      i. Sudo apt-get update -y
      ii. Sudo apt-get upgrade
   b. Required:
      i. curl -fsSL https://get.docker.com -o get-docker.sh
      ii. sudo sh get-docker.sh
      iii. sudo usermod -aG docker ubuntu
      iv. newgrp docker

6. Configure EC2 as self-hosted runner:
   a. Setting > actions > runner > new self hosted runner > choose os > then run command one by one
7. Setup github secrets:
      i. AWS_ACCESS_KEY_ID
      ii. AWS_SECRET_ACCESS_KEY
      iii. AWS_REGION
      iv. AWS_ECR_LOGIN_URI = <12-digit>.dkr.ecr.ap-south-1.amazonaws.com
      v. ECR_REPOSITORY_NAME = <repository-name>