Useful links:

https://github.com/aws-actions/amazon-ecr-login

Github actions will do the building and testing while githubs will utilize code deploy to do the deploy part of CI/CD.

Start by making a yaml file for your workflow that looks something like below

```
name: CI
on:
 push:
  branches: [ mafia-dev ]
 pull_request:
  branches: [ mafia-dev ]
 workflow_dispatch:
iobs:
 build:
  runs-on: ubuntu-latest
  steps:
   - uses: actions/checkout@v2
   - name: Run a one-line script
     run: echo Hello, world!
   - name: Run a multi-line script
     run:
      echo Add other actions to build,
      echo test, and deploy your project.
 test:
  needs: build
  runs-on: ubuntu-latest
  steps:
   - uses: actions/checkout@v2
   - name: Echo
     run: echo This is a test.
 Deploy:
  needs: test
  runs-on: ubuntu-latest
  steps:
   - uses: actions/checkout@v2
   - name: Echo
     run: echo this is a deployment
   - name: Configure AWS credentials
```

```
uses: aws-actions/configure-aws-credentials@v1
    with:
     aws-access-key-id: ${{ secrets.AWS ACCESS KEY ID }}
     aws-secret-access-key: ${{ secrets.AWS_SECRET_ACCESS_KEY }}
     aws-region: us-east-1
   - name: Login to Amazon ECR
    id: login-ecr
    uses: aws-actions/amazon-ecr-login@v1
   - name: Build, tag, and push the image to Amazon ECR
    id: build-image
    env:
     ECR_REGISTRY: ${{ steps.login-ecr.outputs.registry }}
     ECR REPOSITORY: ${{ secrets.REPO NAME }}
     IMAGE_TAG: 1.0
    run: |
     docker build -t $ECR REGISTRY/$ECR REPOSITORY:$IMAGE TAG.
     echo "Pushing image to ECR..."
     docker push $ECR REGISTRY/$ECR REPOSITORY:$IMAGE TAG
     echo "::set-output name=image::$ECR REGISTRY/$ECR REPOSITORY:$IMAGE TAG"
Create a private ecr repository
Create an aws user
Add permissions and attach existing policy AmazonEC2ContainerRegistryFullAccess
Create the user
```

Add REPO_NAME as the environment name and for the value add your ECR name

Add AWS_ACCESS_KEY_ID as name and paste the value

ADD AWS SECRET ACCESS KEY ID as name and paste value

Copy the access and secret access id

Click on add new repository secrets

Push some code and try the workflow

On github click secrets