Steps for Creating Docker image and Pushing to ECR Repository with the Vulnerability Scanning:

Pre-Requirements:

- Ec2 Instance
- Docker
- Aws-cli

Step1: Connect to the server using the cmd or gitbash :

- Ssh -i “fcra.pem” ubuntu@ip

Step2: Installation of Docker:

- apt-get install docker.io
- systemctl start docker
- systemctl enable docker
- systemctl status docker
-

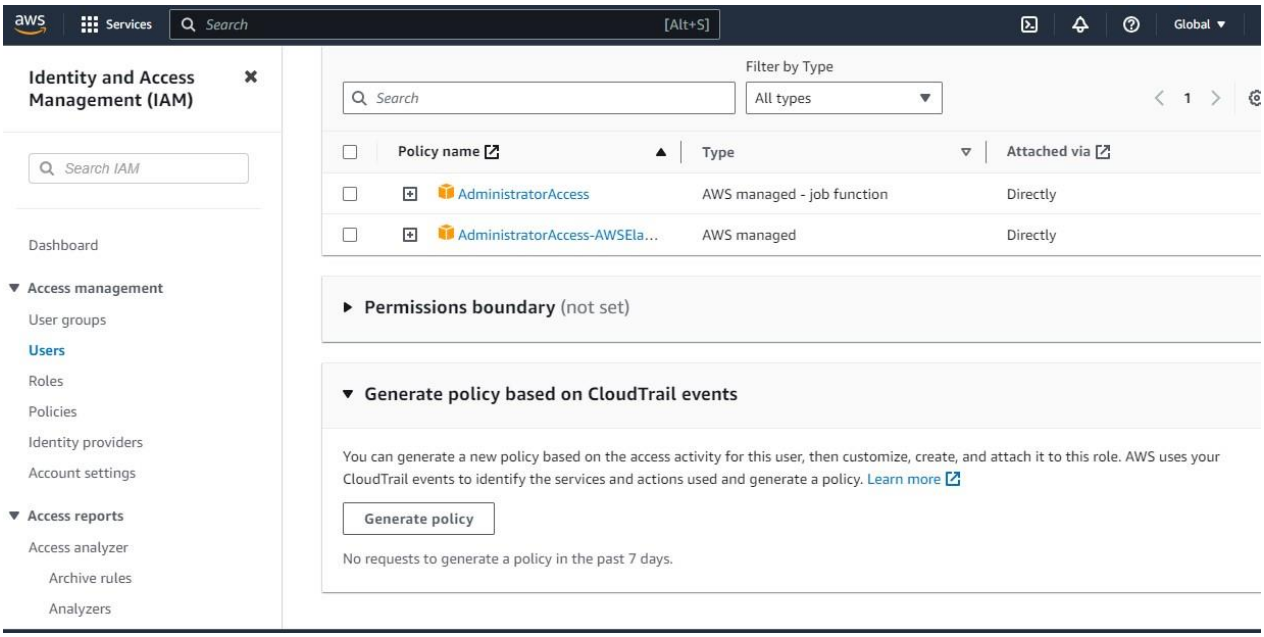
Step3: Installation of Aws Cli :

- curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"
- unzip awscliv2.zip
- apt install unzip -y
- unzip awscliv2.zip
- sudo ./aws/install (To check the path where it installed)
- AWS –version
- AWS configure (enter the id and password details of the iam role which uhave been created)

Step2:

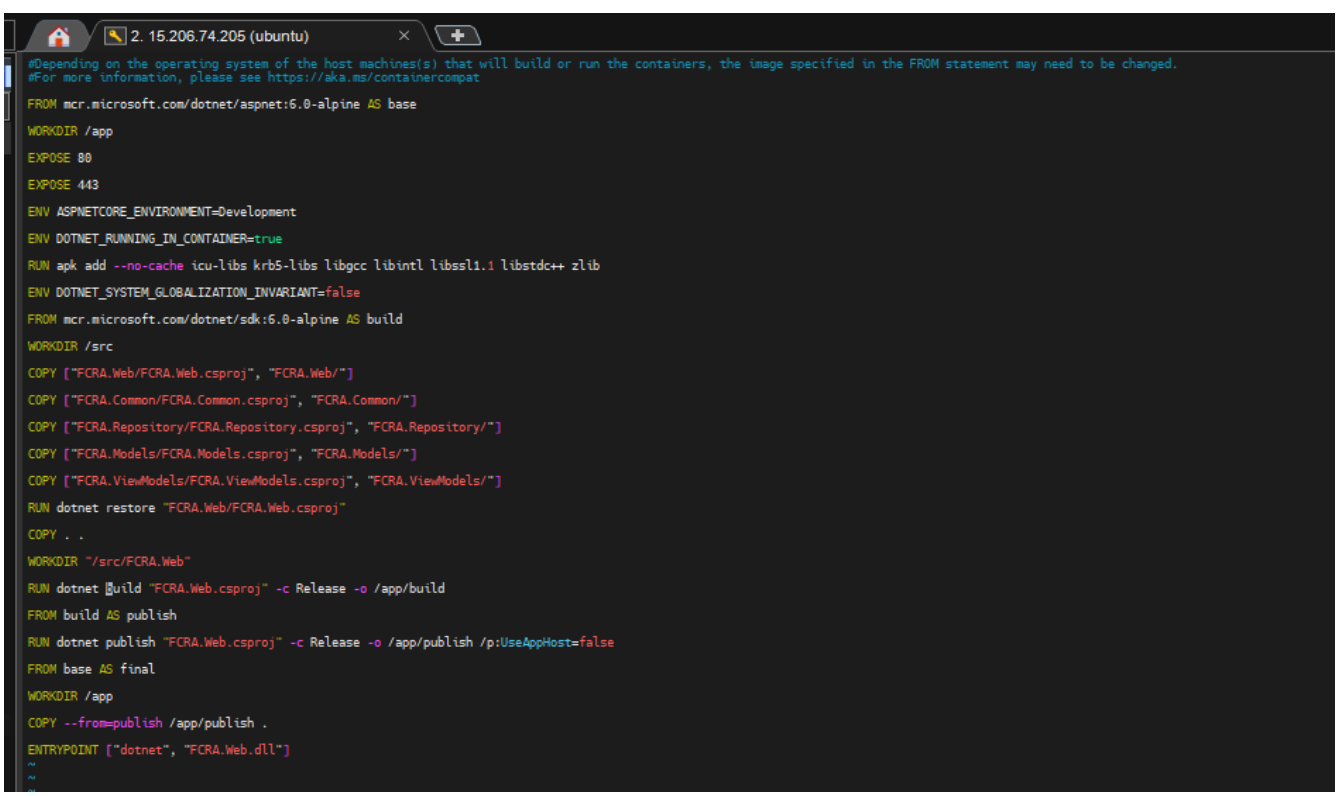
Create a role in AWS with the access of ec2 repository and admin access andcreate access key:

- for further requirements example below. * *
- Access key - AKIAZ75J3DW74LD37UWL
- Secret access key: oMLCWUVtXIQvEYjylnXhsB2tyM3DqKw5UOXE
- Region :ap-south-1



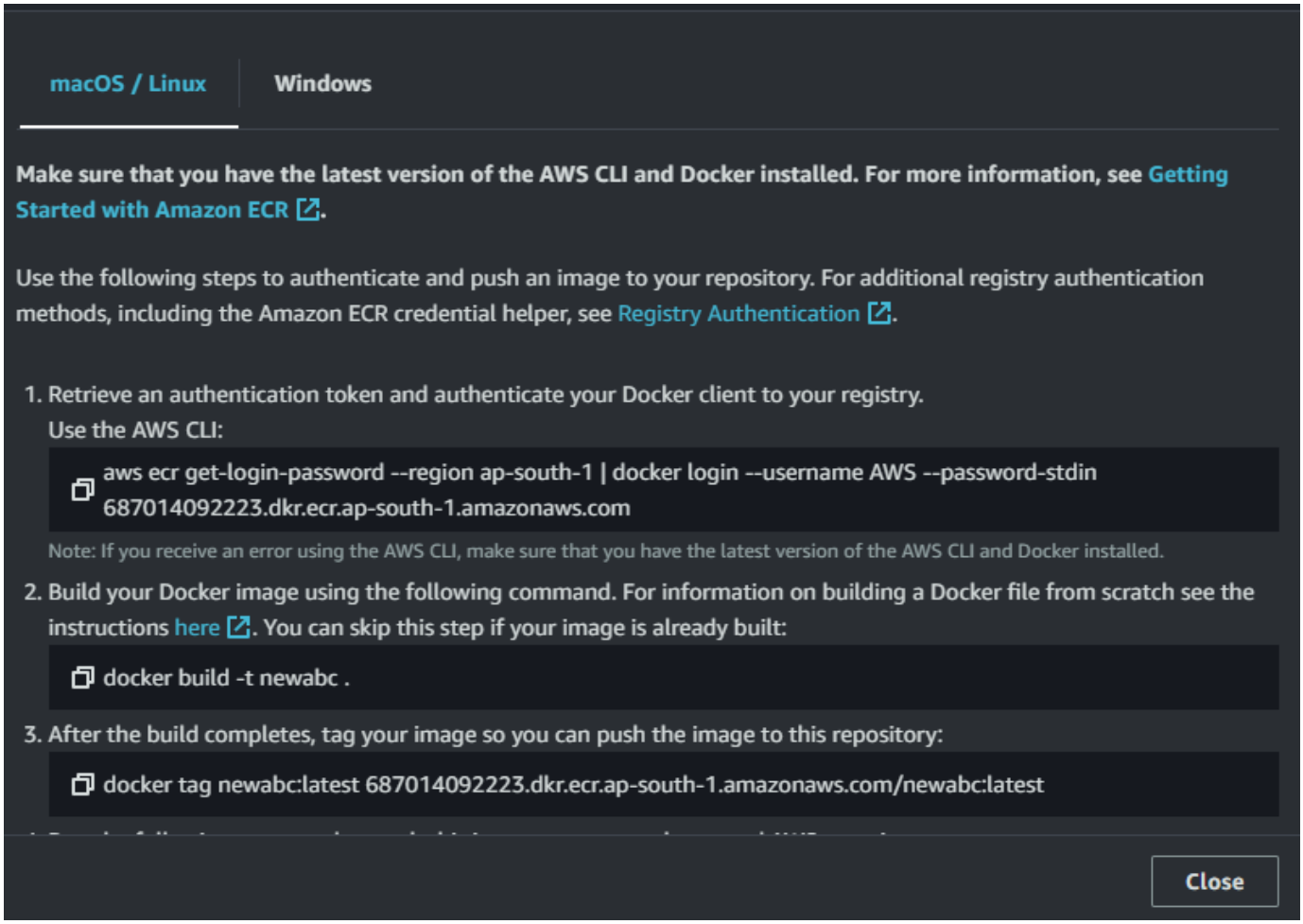
Step3:

- Git clone [<the project from github>](#) (or we candrag and drop the files using tools)
- Create docker file.
- Vi Dockerfile

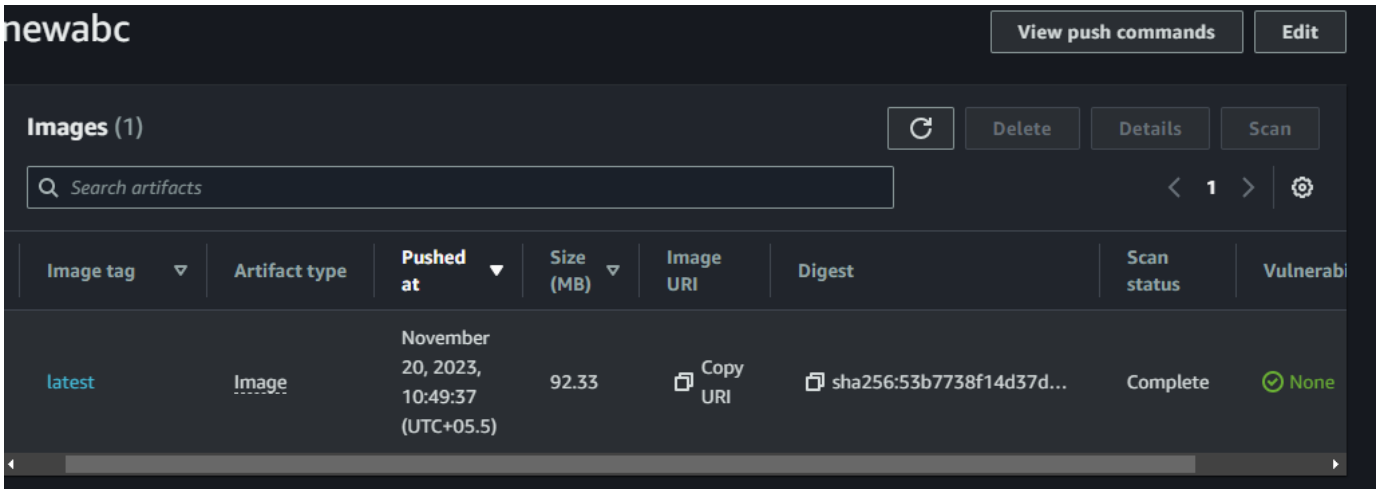


Step4: Create a ECR named Docker-ECR and then click on pushcommands and choose Linux:

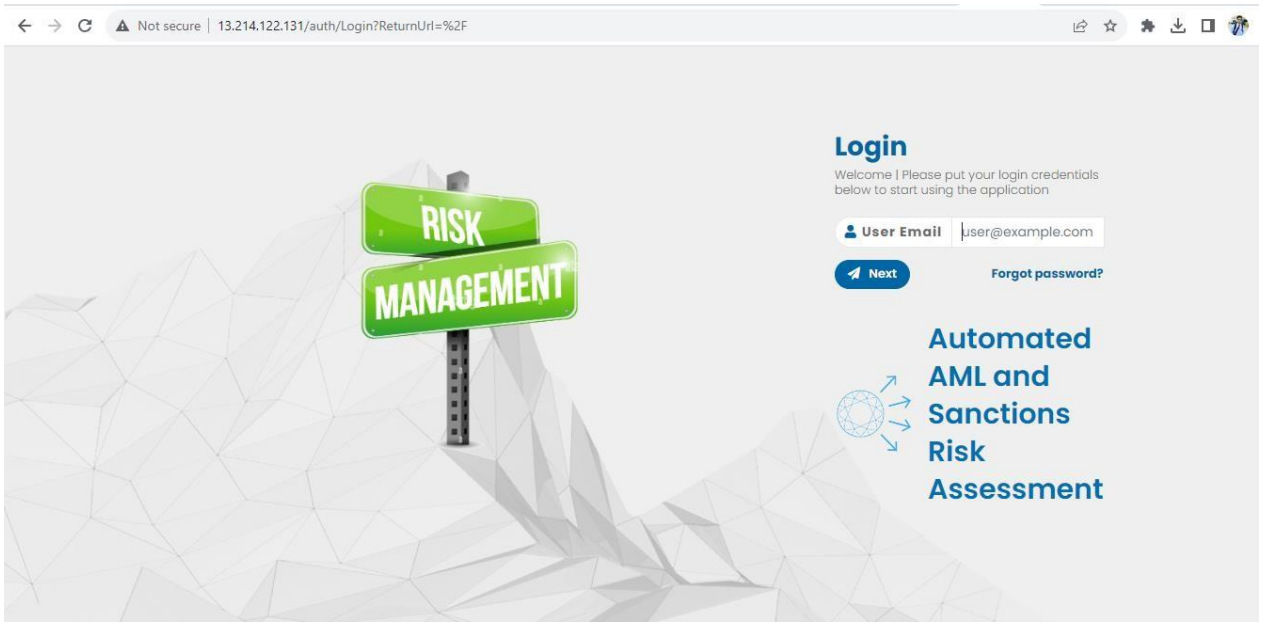
- aws ecr get-login-password --region ap-southeast-1 | docker login -- username AWS --password-stdin 883448062072.dkr.ecr.ap-southeast-1.amazonaws.com
- docker build -t fcra .
- docker images
- docker tag fcra:latest 883448062072.dkr.ecr.ap-southeast-1.amazonaws.com/fcra:latest
- docker push 883448062072.dkr.ecr.ap-southeast-1.amazonaws.com/fcra:latest



- Then check the Vulnerabilities:



Copy the public ip and paste in the brower.



Step6: Create a database for the above ui and attach to it:

- Attach the database server in the local file app.json and connect it to the database.

appsettings.json* Dockerfile FCRA.Web

Schema: https://json.schemastore.org/appsettings.json

```
{
  "ConnectionStrings": {
    "DefaultConnection": "Server=database-1.cpvpuwxaoijn.ap-southeast-1.rds.amazonaws.com;Database=fcra;UID=admin;PWD=VoMyl3S0tO71VafzkN61;TrustServerCertificate=True;"
    //"DefaultConnection": "Server=fcmlerp.database.windows.net,1433;Database=fcradb;UID=fcmluser;PWD=FCml@#12345;"
    //"DefaultConnection": "Server=fcmlerp.database.windows.net,1433;Database=fcrasaib;UID=fcmluser;PWD=FCml@#12345;"
  },
  "StorageSettings": {
    "StorageConnectionString": "DefaultEndpointsProtocol=https;AccountName=fcmlstrg;AccountKey=jFaP2h6mouteJ81eCvbCRWzeJuacoktGP/nhlpC1LJYhQHRg/2zumIJc094nRsZThw5YB7olWlidtbnhApyLMQ==;Endpoi
    "StorageUrl": "https://fcmlstrg.blob.core.windows.net",
    "ContainerName": "fcradev",
    "ProductContainerName": ""
  },
  "IronPdf.LicenseKey": "",
  "Logging": {
    "LogLevel": {
      "Default": "Information",
      "Microsoft.AspNetCore": "Warning"
    }
  },
  "AllowedHosts": "*",
  "RateConfiguration": {
    "GSTRate": 18
  },
  "EmailSettings": {
    "IsThroughSMTP": "N",
    "From": "utsavsingh085@gmail.com",
    "Username": "utsavsingh085@gmail.com",
    "Password": "pnmhxysmdigqjxyd",
    "Host": "smtp.gmail.com",
    "Port": 587
  }
```

Connected to the database using the below details.