

I built a calculator app, using node.js and react. I made sure that the application works as shown in the following image:

Then I implemented it in Docker by creating an image, and then a container to upload the application to

As with the following steps:

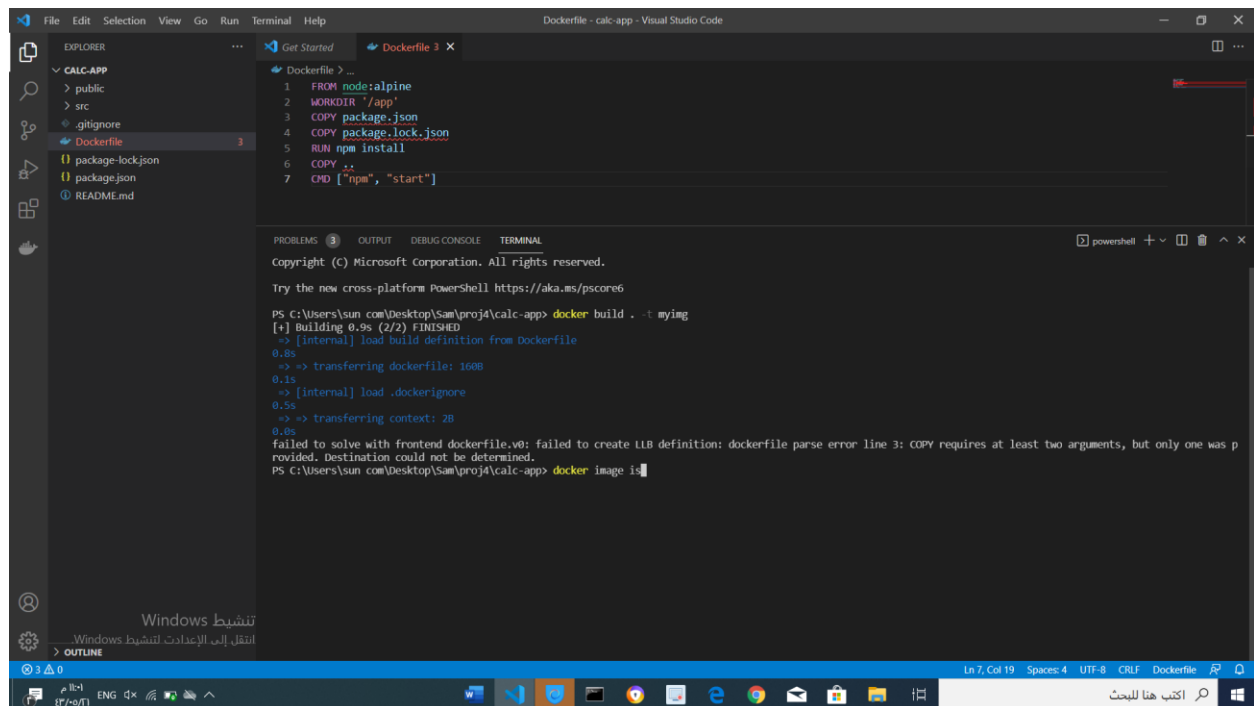
On visual studio code open new terminal and write

- For React Image Creation:

```
docker build -t cdockerreactimage:dev
```

- For Running Container:

```
docker run -it -p 3000:3000 cdockerreactimage:dev
```



The image consists of two screenshots of the Visual Studio Code interface, showing the process of creating and building a Docker image.

**Top Screenshot:** The Explorer pane on the left shows a project named 'CALC-APP' with files like 'public', 'src', '.gitignore', 'Dockerfile', 'package-lock.json', 'package.json', and 'README.md'. The Dockerfile is open in the editor, showing a simple Dockerfile with the following content:

```
1 FROM node:alpine
2 WORKDIR /app
3 COPY package.json
4 COPY package-lock.json
5 RUN npm install
6 COPY .
7 CMD ["npm", "start"]
```

The TERMINAL pane at the bottom shows the command 'docker image ls' being executed, displaying a list of images:

```
PS C:\Users\sun com\Desktop\Sam\proj4\calc-app> docker image ls
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
docker.io/tutorial  latest      d4c08e0d55a   2 days ago   28.5MB
docker.io/getting-started latest      26d88cd96d69  3 weeks ago  28.5MB
alpine/git           latest      c6b78534b534  5 weeks ago  27.4MB
```

**Bottom Screenshot:** The Explorer pane shows the same project, but now with additional files like 'favicon.ico', 'index.html', 'logo192.png', 'logo512.png', 'manifest.json', 'robots.txt', and 'src'. The Dockerfile is still open, but the content is different, showing a more complex Dockerfile:

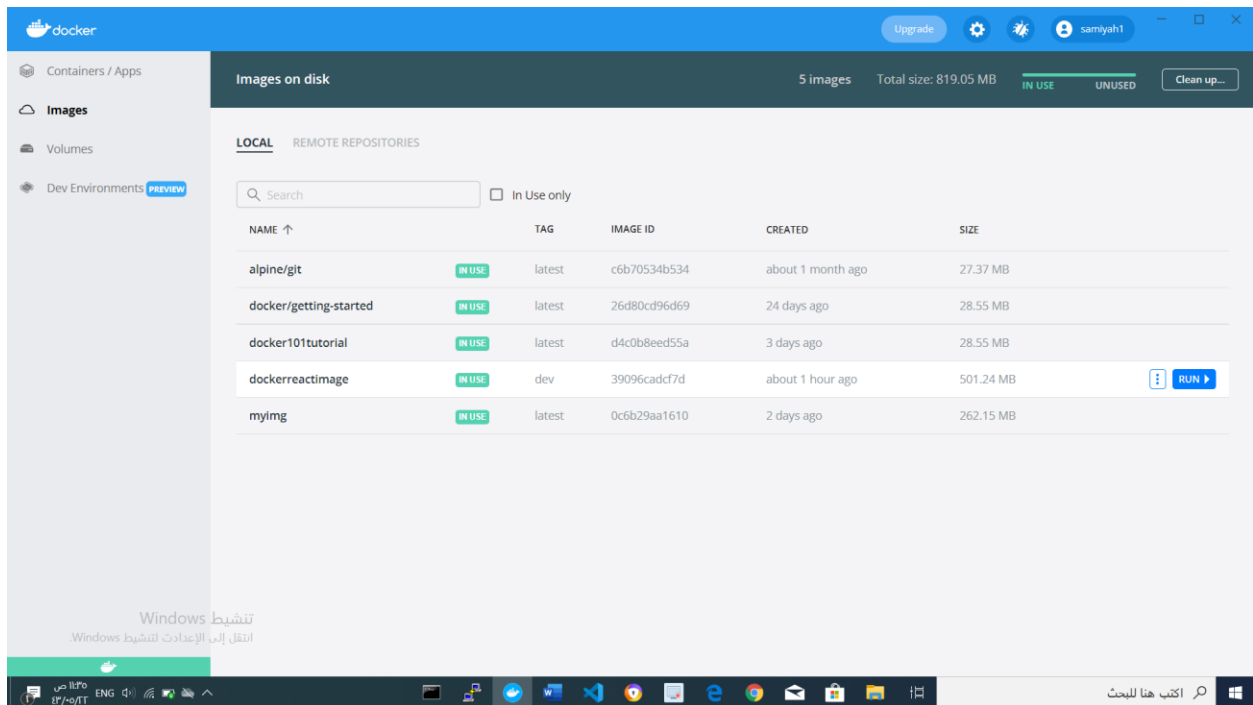
```
1 FROM node:13.12.0-alpine
2 WORKDIR /app
3 ENV PATH /app/node_modules/.bin:PATH
4 COPY package.json ./
5 COPY package-lock.json ./
6 RUN npm install --silent
7 RUN npm install react-scripts@5.0.0 -g --silent
8 COPY . ./
9 CMD ["npm", "start"]
```

The TERMINAL pane shows the command 'docker build -t dockerreactimage:dev .' being executed, displaying the build progress and output:

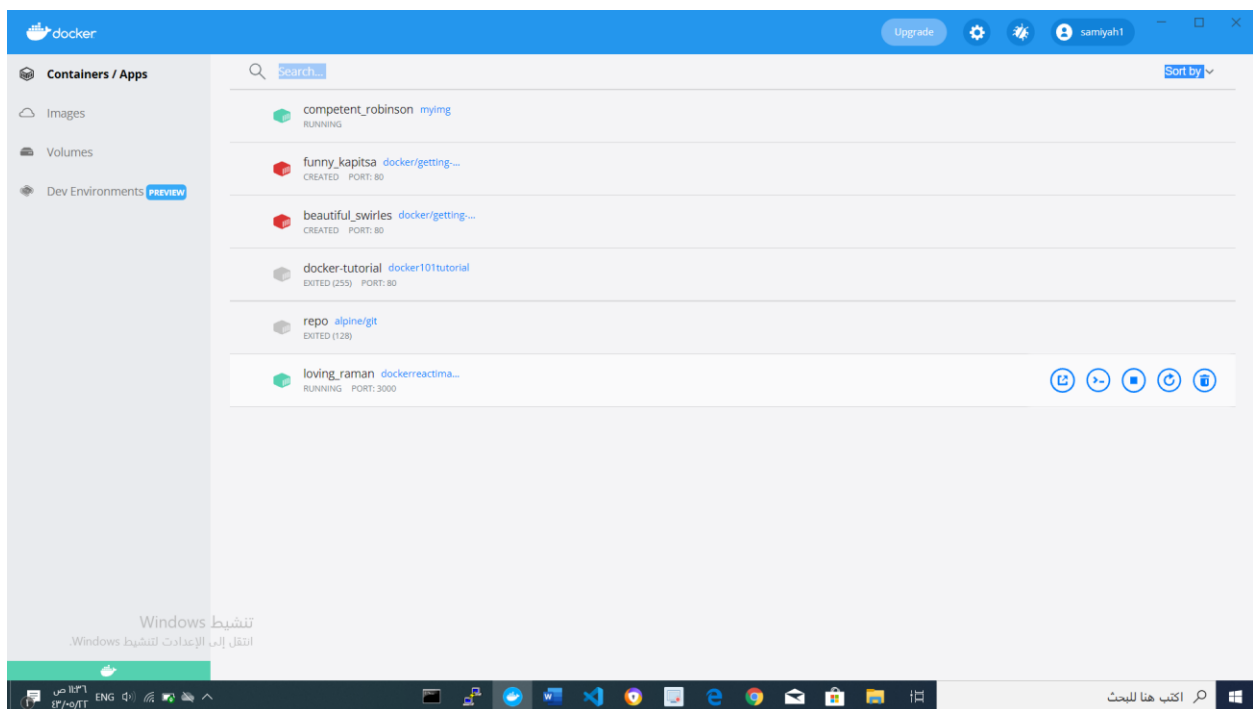
```
PS C:\Users\sun com\Desktop\Sam\proj4\calc-app> docker build -t dockerreactimage:dev .
[+] Building 470.7s (13/13) FINISHED
=> [internal] load build definition from Dockerfile
=> transferring dockerfile: 275B
=> [internal] load .dockerignore
=> transferring context: 305B
=> [internal] load metadata for docker.io/library/node:13.12.0-alpine
=> [auth] library/node:pull token for registry-1.docker.io
=> [1/7] FROM docker.io/library/node:13.12.0-alpine@sha256:cc85e728fab3827ada20a181ba280cae1f8b6
=> resolve docker.io/library/node:13.12.0-alpine@sha256:cc85e728fab3827ada20a181ba280cae1f8b6
=> sha256:cc85e728fab3827ada20a181ba280cae1f8b6:252e2c8b994a59f4e34766 1.19kB / 1.19kB
=> sha256:ed0620d8f6f471160a5f5e9f147fb259639966119e1b36a52303c5615f 1.16kB / 1.16kB
=> sha256:481343dc65f5d6586e3b7c16e4299247f705bef4025012457ee105481a1afC1 6.77kB / 6.77kB
=> sha256:c57f2c59b93778192e60e0e213949630f9ad38324736bbba71e12adffa16d46 2.24MB / 2.24MB
=> sha256:aade3a339440e7c3e1fff20e88911b9bf81280042fa7f39a5e327023056819 2.80MB / 2.80MB
=> sha256:a0b0d932208e2d29c2d2b7e0bab954325913d146401effb482fff3d8775aaab 35.72MB / 35.72MB
=> sha256:f3446470f207e51c1627f90f7a69a4f1ee7b6c8e529aec83a1a0a4d70531c0 284B / 284B
=> extracting sha256:aade3a339440e7c3e1fff20e88911b9bf81280042fa7f39a5e327023056819
=> extracting sha256:a0b0d932208e2d29c2d2b7e0bab954325913d146401effb482fff3d8775aaab
=> extracting sha256:c57f2c59b93778192e60e0e213949630f9ad38324736bbba71e12adffa16d46
=> extracting sha256:f3446470f207e51c1627f90f7a69a4f1ee7b6c8e529aec83a1a0a4d70531c0
=> [internal] load build context
=> transferring context: 1.18MB
=> [2/7] WORKDIR /app
=> [3/7] COPY package.json ./
=> [4/7] COPY package-lock.json ./
=> [5/7] RUN npm install --silent
=> [6/7] RUN npm install react-scripts@5.0.0 -g --silent
=> [7/7] COPY . ./
=> exporting to image
```

To verify the image and the container, I log on to "Docker Hub"

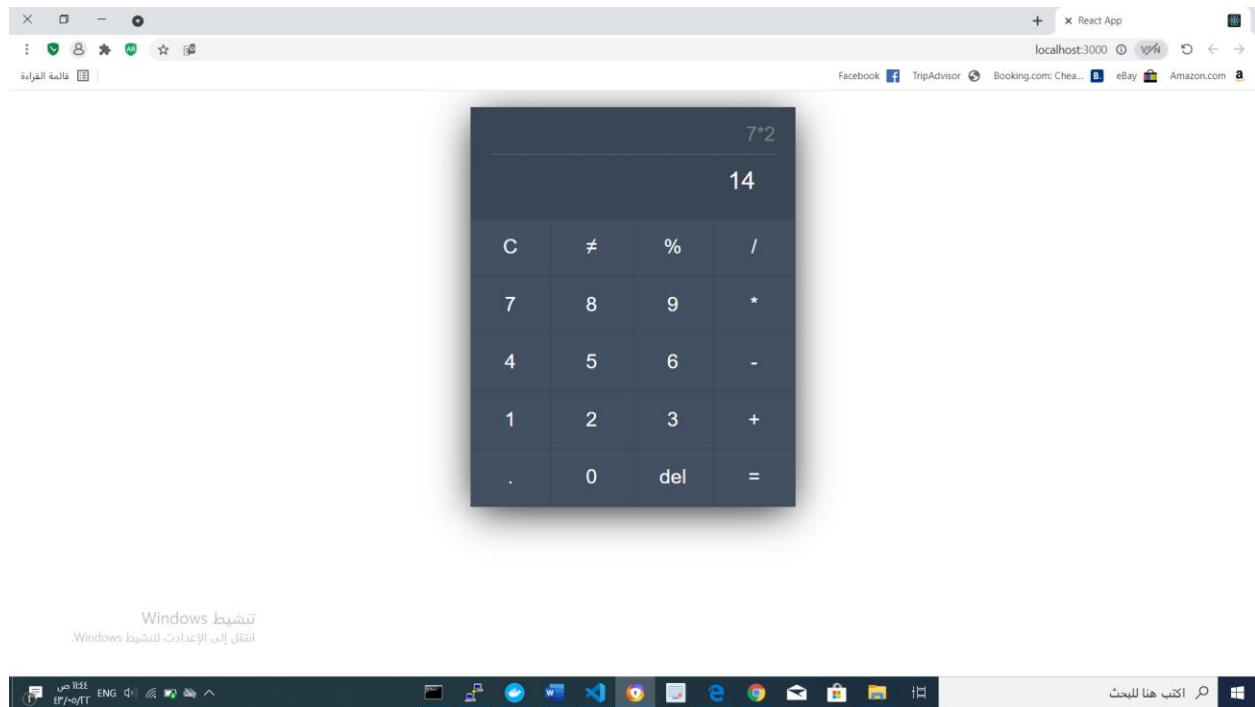
Check image:



Check containers:



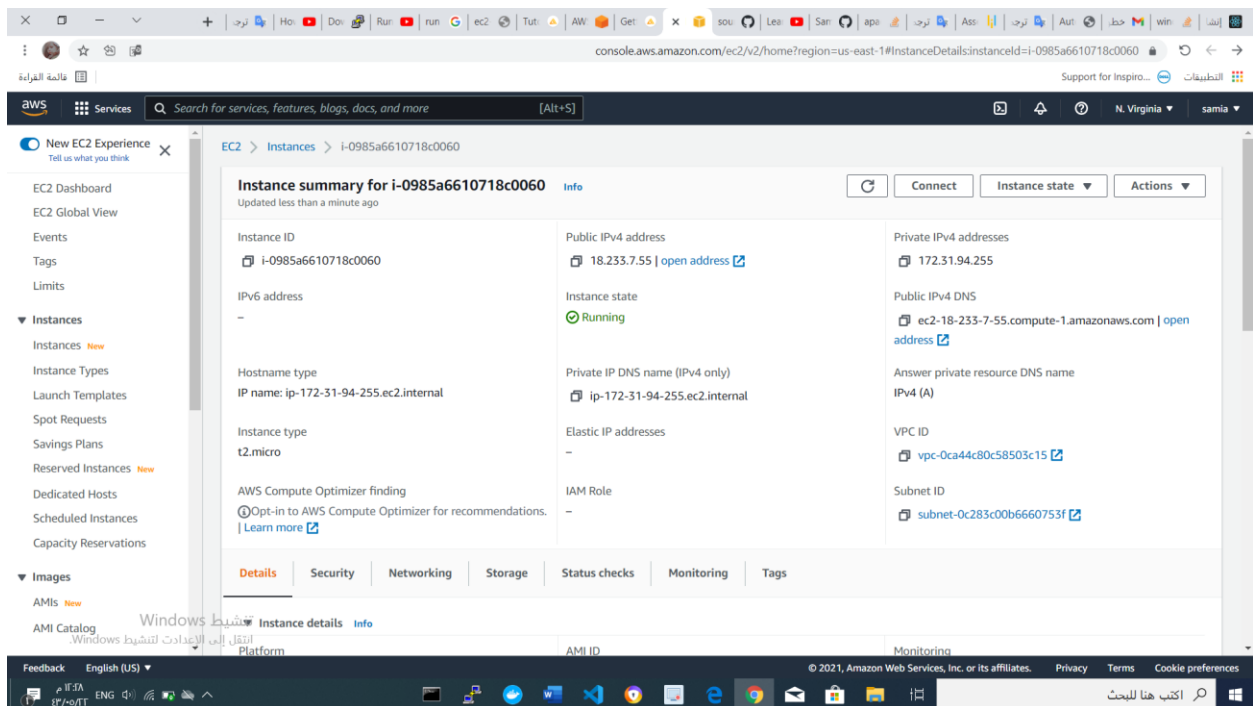
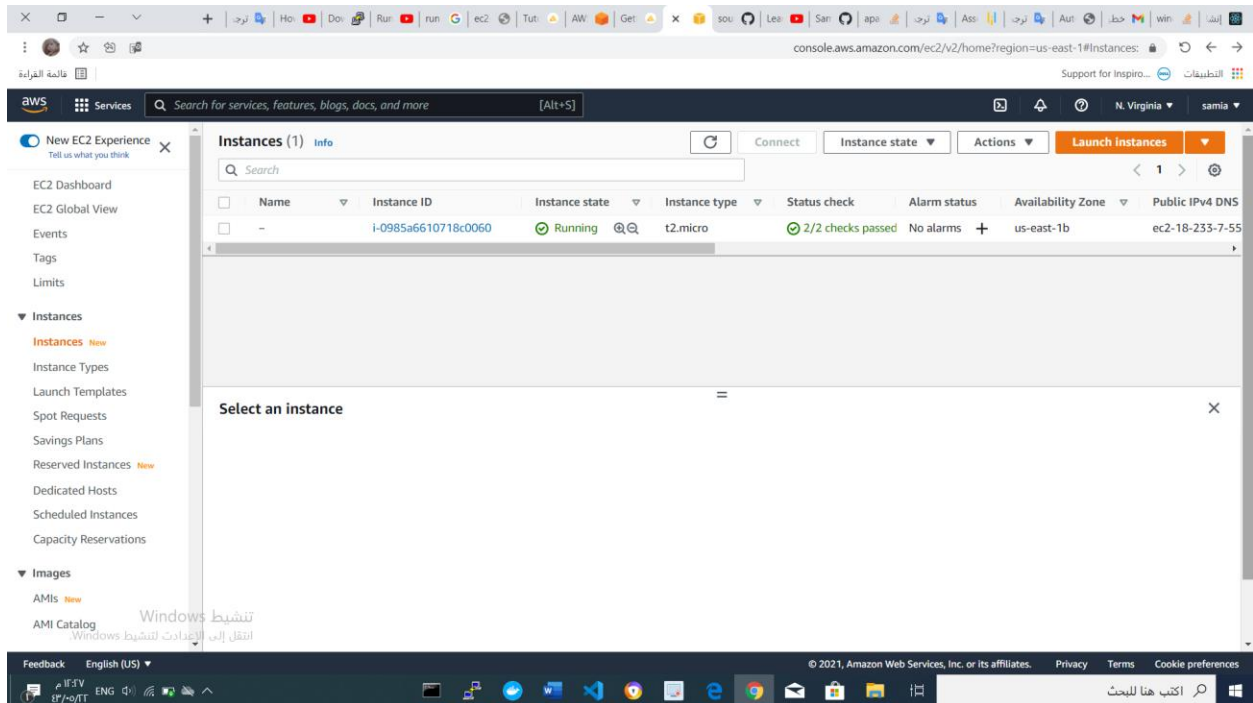
From container click on "open in browser":



After that I signed up for Amazon and try to run the app on Ec2

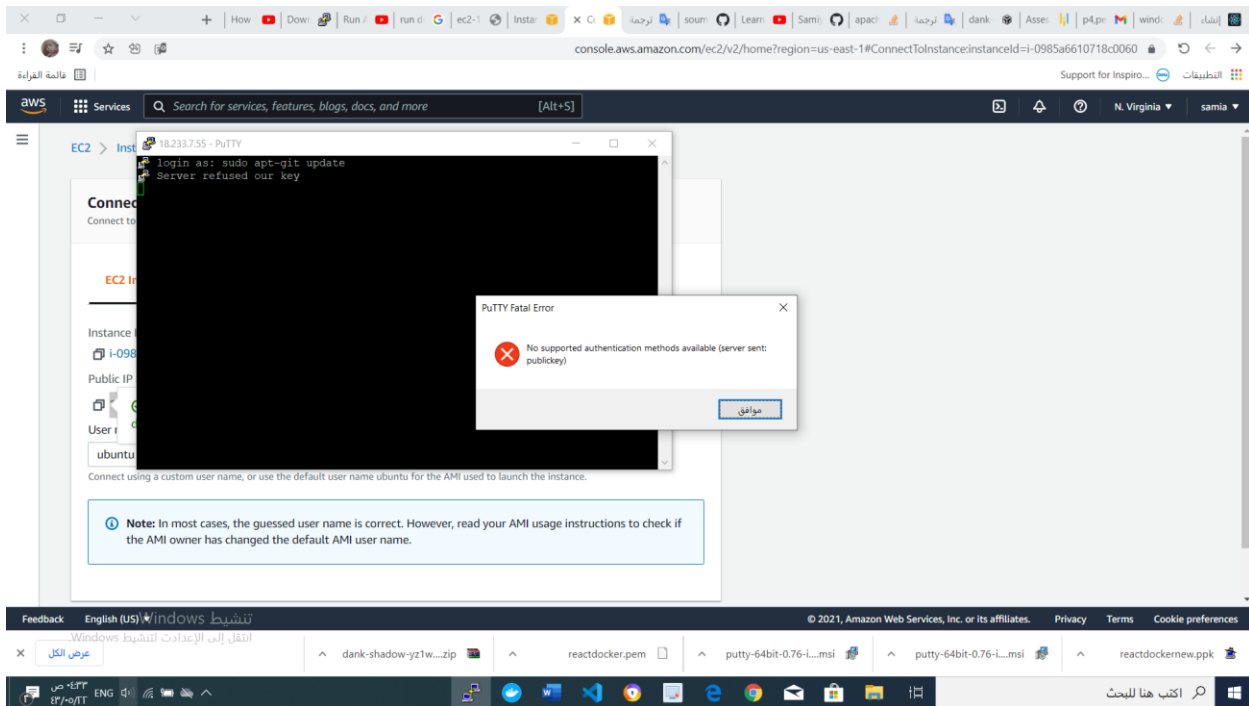
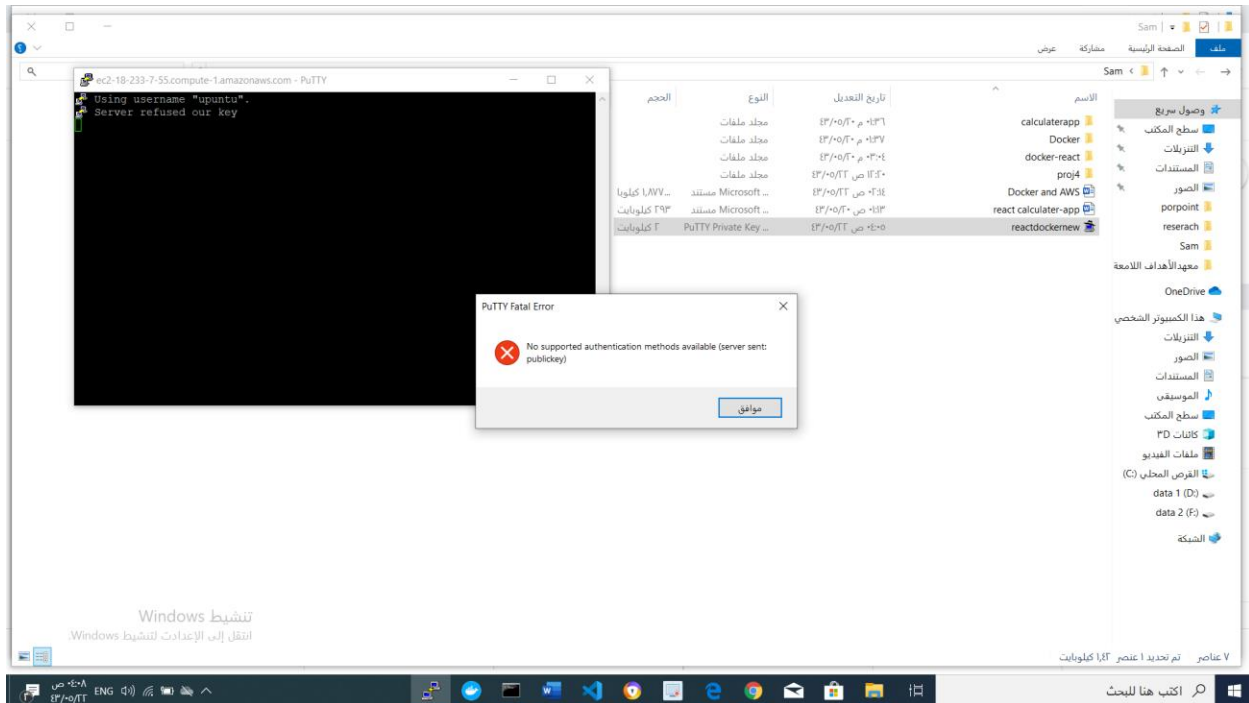
From here, the steps began

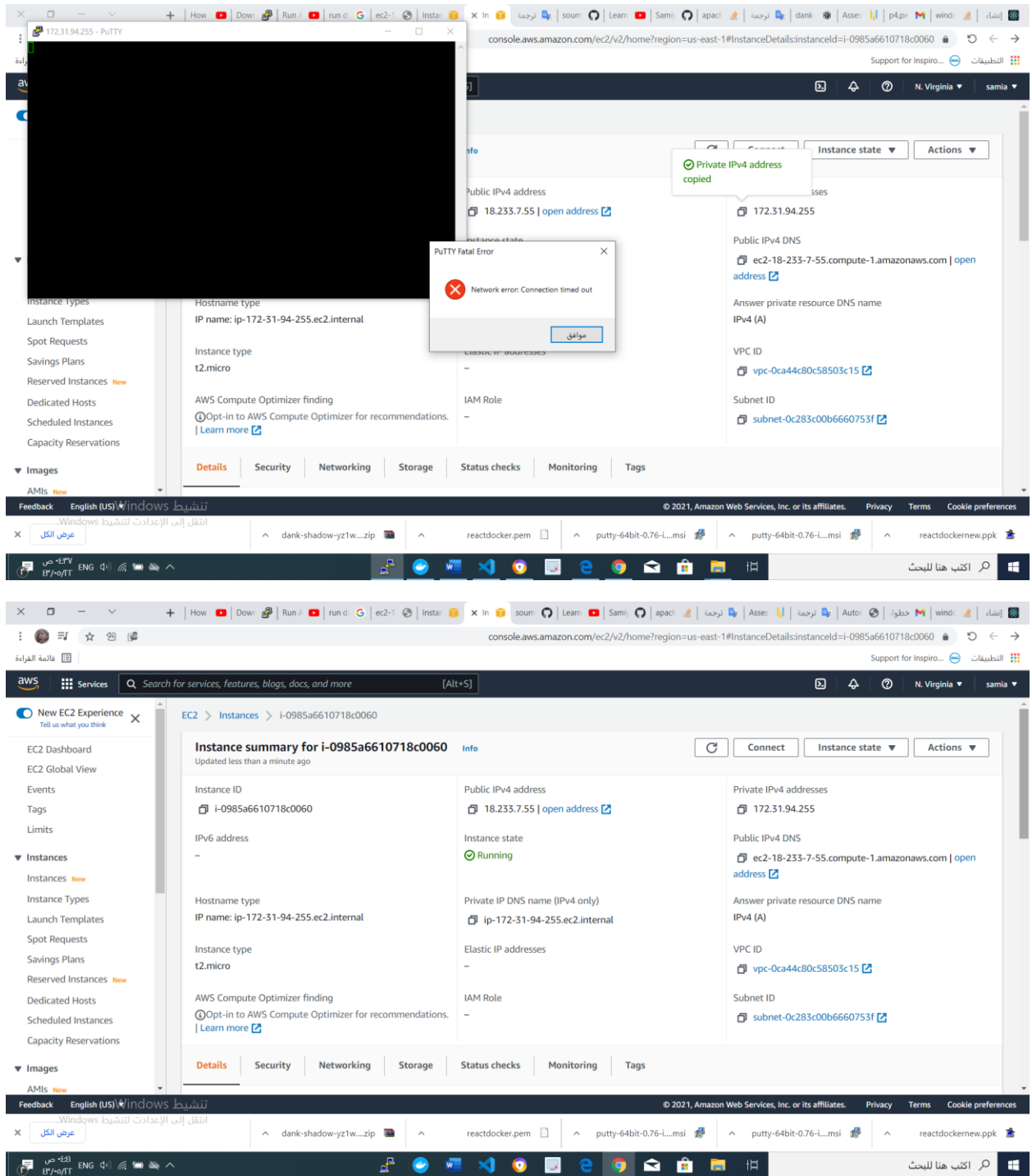
Open AWS -> instance- >launch instance->select"ubuntu server->next  
configureinstance details->next->next->next->review and launch-> launch.

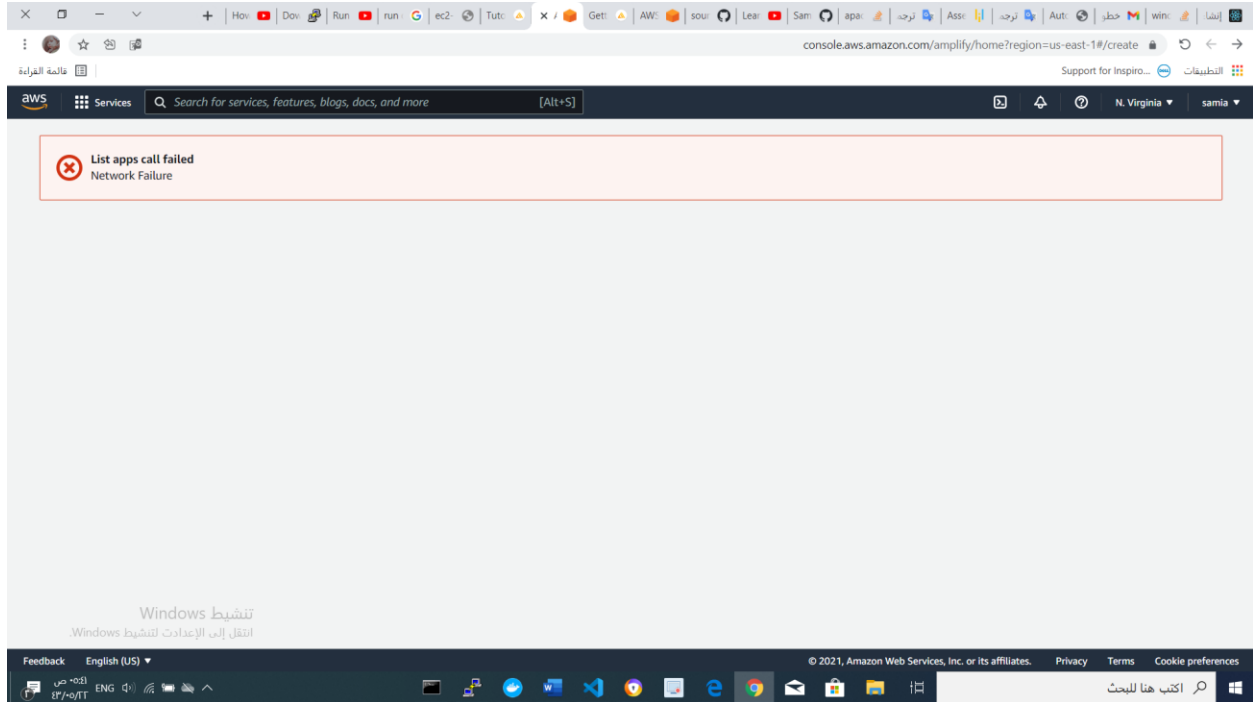


From select key and convert it from .pem to .ppk, and when i connect in with server it's not runing!

I faced this problem, and am hard wored to solve it but is not fexed "اريد توجيهكم"







I tried to run it with c3 container or amplify but also there are some issues.