1. Create a new instance.

- Application and OS Images (Amazon Machine Image) select Amazon Linux and 64-bit Architecture, AMI ID.
- Create a New Key Pair with a random name and select. ppk as private key file format. Click on Create key pair (file fill gets auto download).
- Check to Allow SSH traffic from & Allow HTTPS traffic from the internet.
- Click on launch instance.

2. Connection Instance with Putty

- Download Putty and extract it.
- Click on top of the instance Id from Newley created instance.
- Copy the Public IPv4 DNS address and paste it in the putty Host Name (or IP address)
- Expand SSH left panel in putty.
- Expand the Auth panel under SSH in Putty
- Click on Credentials
- Click on browse for the Private key file for authentication.
- Upload the ppk file which was downloaded initially on creating the instance.
- Click on open.
- Click on the accept button if modal windows open with the title of PuTTY Security Alert
- Login as ec2-user
- Message Authenticating with public key and now it got connected.

3. Run this command:

- <u>curl -o- https://raw.githubusercontent.com/nvm-</u>
 <u>sh/nvm/v0.39.5/install.sh | bash</u> (It downloads and executes a script from the specified URL)
- sudo yum update.
- sudo systemctl status nginx (It shows nginx running status)
- sudo systemctl start nginx (To start nginx)
- sudo vim /etc/nginx/nginx.conf (To edit the configuration of nginx)
- Click on I to write the method and paste the below lines!

location { proxy_pass http://localhost:3210; proxy_http_version 1.1; proxy_set_header Upgrade \$http_upgrade; proxy_set_header Connection 'upgrade'; proxy_set_header Host \$host; proxy_cache_bypass \$http_upgrade;

}

4. Run this command:

- sudo systemctl restart nginx (To restart nginx) after that check the nginx status, it needs to active (running) state
- sudo yum install git (install Git)
- sudo git clone https://github.com/fayazahamedd/reactPortFolio.git

5. Run the commands:

- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ cd ..
- [ec2-user@ip-172-31-4-163 ~]\$ cd ..
- [ec2-user@ip-172-31-4-163 home]\$ ls
- ec2-user
- [ec2-user@ip-172-31-4-163 home]\$ cd ec2-user/
- [ec2-user@ip-172-31-4-163 ~]\$ sudo chmod -R 777 reactPortFolio/
- [ec2-user@ip-172-31-4-163 ~]\$ cd reactPortFolio/
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ sudo yum install -y nodejs
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ sudo npm install -g npm@10.3.0
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ npm install -force
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ sudo yum install xdg-utils
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ npm run dev
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ npm run build
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ sudo npm install pm2 -g
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ pm2 start npm --name "reactPortFolio" -- run dev.
- [ec2-user@ip-172-31-4-163 reactPortFolio]\$ pm2 status(To check the status of pm2)

6.	Copy the Public IPv4 address from the instance summary paste it in Chrome and
	finally web app starts running.

```
ec2-user@ip-172-31-23-191:~/reactPortFolio
 🗗 login as: ec2-user
  Authenticating with public key "reactPortAmazonLinux"
                     Amazon Linux 2023
        ####
        #####\
         \###|
                     https://aws.amazon.com/linux/amazon-linux-2023
Last login: Thu Jan 25 16:46:45 2024 from 157.50.30.96
[ec2-user@ip-172-31-23-191 ~]$ sudo vim /etc/nginx/nginx.conf
[ec2-user@ip-172-31-23-191 ~]$ sudo vim /etc/nginx/nginx.conf
[ec2-user@ip-172-31-23-191 ~]$ sudo systemctl restart nginx
[ec2-user@ip-172-31-23-191 ~]$ sudo systemctl status nginx
nginx.service - The nginx HTTP and reverse proxy server
     Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; preset: d>
     Active: active (running) since Thu 2024-01-25 16:52:51 UTC; 3s ago
    Process: 25714 ExecStartPre=/usr/bin/rm -f /run/nginx.pid (code=exited, sta>
    Process: 25729 ExecStartPre=/usr/sbin/nginx -t (code=exited, status=0/SUCCE>
    Process: 25734 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCCESS)
   Main PID: 25747 (nginx)
     Tasks: 2 (limit: 1114)
    Memory: 2.2M
        CPU: 53ms
     CGroup: /system.slice/nginx.service
               -25747 "nginx: master process /usr/sbin/nginx"
             L25748 "nginx: worker process"
Jan 25 16:52:51 ip-172-31-23-191.us-east-2.compute.internal systemd[1]: Startin>
Jan 25 16:52:51 ip-172-31-23-191.us-east-2.compute.internal nginx[25729]: nginx>
Jan 25 16:52:51 ip-172-31-23-191.us-east-2.compute.internal nginx[25729]: nginx>
Jan 25 16:52:51 ip-172-31-23-191.us-east-2.compute.internal systemd[1]: Started>
lines 1-18/18 (END)
[ec2-user@ip-172-31-23-191 ~]$ ^C
[ec2-user@ip-172-31-23-191 ~]$ sudo yum install git
Last metadata expiration check: 0:06:38 ago on Thu Jan 25 16:46:28 2024.
Dependencies resolved.
 Package
                               Version
                                                            Repository
Installing:
                     x86 64
                               2.40.1-1.amzn2023.0.1
                                                            amazonlinux
                                                                            57 k
Installing dependencies:
```

: qit-2.40.1-1.amzn2023.0.1.x86 64

: git-2.40.1-1.amzn2023.0.1.x86 64

: git-core-2.40.1-1.amzn2023.0.1.x86 64

: perl-lib-0.65-477.amzn2023.0.6.x86 64

: perl-TermReadKey-2.38-9.amzn2023.0.2.x86 64

: git-core-doc-2.40.1-1.amzn2023.0.1.noarch

Running scriptlet: git-2.40.1-1.amzn2023.0.1.x86 64

Installing

Verifying

Verifying

Verifying

Verifying

Verifying

8/8

8/8 1/8

2/8

3/8

4/8

5/8

[ec2-user@ip-172-31-23-191 reactPortFolio]\$ sudo npm install -g npm@10.3.0

added 1 package in 6s

```
lib/ionicons/css/ionicons.min.css doesn't exist at build time, it will remain un
changed to be resolved at runtime
path/to/font-awesome/css/font-awesome.min.css doesn't exist at build time, it wi
ll remain unchanged to be resolved at runtime
62 modules transformed.
Unknown output options: mimeTypes, scriptType. Allowed options: amd, assetFileNa
mes, banner, chunkFileNames, compact, dir, dynamicImportInCjs, entryFileNames, e
sModule, experimentalMinChunkSize, exports, extend, externalImportAssertions, ex
ternalImportAttributes, externalLiveBindings, file, footer, format, freeze, gene
ratedCode, globals, hoistTransitiveImports, indent, inlineDynamicImports, intero
p, intro, manualChunks, minifyInternalExports, name, noConflict, outro, paths, p
lugins, preserveModules, preserveModulesRoot, sanitizeFileName, sourcemap, sourc
emapBaseUrl, sourcemapExcludeSources, sourcemapFile, sourcemapFileNames, sourcem
apIgnoreList, sourcemapPathTransform, strict, systemNullSetters, validate
dist/index.html
                                  0.78 kB | gzip: 0.39 kB
dist/assets/index-NOEai7xf.css 13.66 kB
                                          gzip: 3.68 kB
dist/assets/index-x5JV tE7.js 276.66 kB | qzip: 87.56 kB
√ built in 5.88s
[ec2-user@ip-172-31-23-191 reactPortFolio]$ sudo npm install pm2 -q
npm WARN deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older v
ersions may use Math.random() in certain circumstances, which is known to be pro
blematic. See https://v8.dev/blog/math-random for details.
added 157 packages in 14s
13 packages are looking for funding
 run `npm fund` for details
npm notice
npm notice New minor version of npm available! 10.3.0 -> 10.4.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.4.0
npm notice Run npm install -q npm@10.4.0 to update!
npm notice
[ec2-user@ip-172-31-23-191 reactPortFolio]$ sudo npm install pm2 -q
npm WARN deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older v
ersions may use Math.random() in certain circumstances, which is known to be pro
blematic. See https://v8.dev/blog/math-random for details.
changed 157 packages in 9s
13 packages are looking for funding
 run `npm fund` for details
[ec2-user@ip-172-31-23-191 reactPortFolio] $ pm2 start npm --name "reactPortFolio"
" -- run dev
```

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Runtime Edition

PM2 is a Production Process Manager for Node.js applications with a built-in Load Balancer.

Start and Daemonize any application:
\$ pm2 start app.js

Load Balance 4 instances of api.js: \$ pm2 start api.js -i 4

Monitor in production: \$ pm2 monitor

Make pm2 auto-boot at server restart:
\$ pm2 startup

To go further checkout: http://pm2.io/

- [PM2] Spawning PM2 daemon with pm2 home=/home/ec2-user/.pm2
- [PM2] PM2 Successfully daemonized
- [PM2] Starting /usr/local/bin/npm in fork mode (1 instance)
- [PM2] Done.

id	name	mode		status	cpu	memory
0	reactPortFolio	fork	0	online	0%	33.2mb

[ec2-user@ip-172-31-23-191 reactPortFolio]\$ pm2 status

id	name	mode		status	cpu	memory
0	reactPortFolio	fork	0	online	0%	71.8mb

[ec2-user@ip-172-31-23-191 reactPortFolio]\$ ^C