Task 1: Deploy an EC2 Instance

```
ec2-user@ip-172-31-47-163:~/nodeapp/simple-react-node-app/backend
$ mkdir ~/.ssh

kirub@kir3verse MINGW64 ~
$ cp ~/Downloads/new-key-for-computer-server-1.pem ~/.ssh

kirub@kir3verse MINGW64 ~
$ cd .ssh

kirub@kir3verse MINGW64 ~/.ssh
$ ^[[200~chmod 400 ~/.ssh/new-key-for-computer-server-1.pem
bash: $'\E[200~chmod': command not found

kirub@kir3verse MINGW64 ~/.ssh
$ chmod 400 ~/.ssh/new-key-for-computer-server-1.pem

kirub@kir3verse MINGW64 ~/.ssh
$ ^[[200~$ ssh
bash: $'\E[200~$': command not found

kirub@kir3verse MINGW64 ~/.ssh
$ ssh -i ~/.ssh/new-key-for-computer-server-1.pem ec2@3.85.185.166
The authenticity of host '3.85.185.166 (3.85.185.166)' can't be established.
ED25519 key fingerprint is SHA256:bx5LF9OfrnA5j5BwBAuNt2hOjG/PTWJEp6Y96OhampE.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '3.85.185.166' (ED25519) to the list of known hosts.
ec2@3.85.185.166: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).

kirub@kir3verse MINGW64 ~/.ssh
$ ssh -i ~/.ssh/new-key-for-computer-server-1.pem ec2-user@3.85.185.166
     '_   #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~      \###|
  ~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~      V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
        _/m/'
Last login: Fri Oct  4 02:52:49 2024 from 18.206.107.27
[ec2-user@ip-172-31-47-163 ~]$ ls
nodeapp
```

```
ec2-user@ip-172-31-47-163:~/nodeapp/simple-react-node-app/backend
[ec2-user@ip-172-31-47-163 nodeapp]$ npm --version
-bash: npm: command not found
[ec2-user@ip-172-31-47-163 nodeapp]$ curl -sL https://rpm.nodesource.com/setup_20.x | sudo bash -
2024-10-04 03:33:22 - Cleaning up old repositories...
2024-10-04 03:33:22 - Old repositories removed
2024-10-04 03:33:22 - Supported architecture: x86_64
2024-10-04 03:33:22 - Added N|Solid repository for LTS version: 20.x
2024-10-04 03:33:22 - dnf available, updating...
Node.js Packages for Linux RPM based distros - x86_64                           5.6 MB/s | 750 kB     00:00
N|Solid Packages for Linux RPM based distros - x86_64                           3.4 MB/s | 483 kB     00:00
Metadata cache created.
2024-10-04 03:33:23 - Repository is configured and updated.
2024-10-04 03:33:23 - Run 'dnf install nodejs -y' to complete the installation.
2024-10-04 03:33:23 - You can use N|solid Runtime as a node.js alternative
2024-10-04 03:33:23 - To install N|solid Runtime, run: dnf install nsolid -y

[ec2-user@ip-172-31-47-163 nodeapp]$ npm --version
-bash: npm: command not found
[ec2-user@ip-172-31-47-163 nodeapp]$ sudo yum install nodejs -y
Last metadata expiration check: 0:01:13 ago on Fri Oct  4 03:33:22 2024.
Dependencies resolved.
================================================================================================================
 Package              Architecture         Version                       Repository                        Siz
================================================================================================================
Installing:
 nodejs               x86_64               2:20.17.0-1nodesource         nodesource-nodejs                  36

Transaction Summary
================================================================================================================
Install  1 Package

Total download size: 36 M
Installed size: 105 M
Downloading Packages:
nodejs-20.17.0-1nodesource.x86_64.rpm                                              28 MB/s |  36 MB     00:01
----------------------------------------------------------------------------------------------------------------
Total                                                                              28 MB/s |  36 MB     00:01
Node.js Packages for Linux RPM based distros - x86_64                              65 kB/s | 3.1 kB     00:00
Importing GPG key 0x3AF28A14:
 Userid     : "Nodesource Operations <operations@nodesource.com>"
 Fingerprint: 242B 8138 31AF 0956 2B6C 46F7 6B88 DA4E 3AF2 8A14
 From       : https://rpm.nodesource.com/gpgkey/ns-operations-public.key
Key imported successfully
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                                                          1/
```

```
bash: git: command not found
[ec2-user@ip-172-31-47-163 nodeapp]$ sudo yum install git -y
Last metadata expiration check: 0:11:30 ago on Fri Oct  4 03:33:22 2024.
Dependencies resolved.
================================================================================================================
 Package                Architecture        Version                          Repository
================================================================================================================
Installing:
 git                    x86_64              2.40.1-1.amzn2023.0.3            amazonlinux
Installing dependencies:
 git-core               x86_64              2.40.1-1.amzn2023.0.3            amazonlinux
 git-core-doc           noarch              2.40.1-1.amzn2023.0.3            amazonlinux
 perl-Error             noarch              1:0.17029-5.amzn2023.0.2         amazonlinux
 perl-File-Find         noarch              1.37-477.amzn2023.0.6            amazonlinux
 perl-Git               noarch              2.40.1-1.amzn2023.0.3            amazonlinux
 perl-TermReadKey       x86_64              2.38-9.amzn2023.0.2              amazonlinux
 perl-lib               x86_64              0.65-477.amzn2023.0.6            amazonlinux

Transaction Summary
================================================================================================================
Install  8 Packages

Total download size: 7.1 M
Installed size: 34 M
Downloading Packages:
(1/8): git-2.40.1-1.amzn2023.0.3.x86_64.rpm                             587 kB/s |  54 kB   00:00
(2/8): git-core-doc-2.40.1-1.amzn2023.0.3.noarch.rpm                     22 MB/s | 2.6 MB   00:00
(3/8): perl-File-Find-1.37-477.amzn2023.0.6.noarch.rpm                  889 kB/s |  26 kB   00:00
(4/8): perl-Error-0.17029-5.amzn2023.0.2.noarch.rpm                     828 kB/s |  41 kB   00:00
(5/8): perl-Git-2.40.1-1.amzn2023.0.3.noarch.rpm                        1.1 MB/s |  42 kB   00:00
(6/8): perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64.rpm                  894 kB/s |  36 kB   00:00
(7/8): perl-lib-0.65-477.amzn2023.0.6.x86_64.rpm                        389 kB/s |  15 kB   00:00
(8/8): git-core-2.40.1-1.amzn2023.0.3.x86_64.rpm                         13 MB/s | 4.3 MB   00:00
--------------------------------------------------------------------------------------------------
Total                                                                    19 MB/s | 7.1 MB   00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :
  Installing       : git-core-2.40.1-1.amzn2023.0.3.x86_64
  Installing       : git-core-doc-2.40.1-1.amzn2023.0.3.noarch
  Installing       : perl-lib-0.65-477.amzn2023.0.6.x86_64
  Installing       : perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64
  Installing       : perl-File-Find-1.37-477.amzn2023.0.6.noarch
  Installing       : perl-Error-1:0.17029-5.amzn2023.0.2.noarch
  Installing       : perl-Git-2.40.1-1.amzn2023.0.3.noarch
  Installing       : git-2.40.1-1.amzn2023.0.3.x86_64
```

```
[ec2-user@ip-172-31-47-163 nodeapp]$ git --version
git version 2.40.1
[ec2-user@ip-172-31-47-163 nodeapp]$ git clone https://github.com/Thao-V/simple-react-node-app.git
Cloning into 'simple-react-node-app'...
remote: Enumerating objects: 15, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 15 (delta 3), reused 12 (delta 2), pack-reused 0 (from 0)
Receiving objects: 100% (15/15), 13.50 KiB | 6.75 MiB/s, done.
Resolving deltas: 100% (3/3), done.
```

```
README.md  backend  node_modules  package-lock.json  package.json
[ec2-user@ip-172-31-47-163 simple-react-node-app]$ cd backend/
[ec2-user@ip-172-31-47-163 backend]$ pm2 start app.js
[PM2] Starting /home/ec2-user/nodeapp/simple-react-node-app/backend/app.js in fork_mode (1 instance)
[PM2] Done.
```

id	name	namespace	version	mode	pid	uptime	↺	status	cpu	mem	user	watching
0	app	default	1.0.0	fork	29197	0s	0	online	0%	38.3mb	ec2-user	disabled

```
[ec2-user@ip-172-31-47-163 backend]$ node app.js
```

```
Node.js v20.17.0
[ec2-user@ip-172-31-47-163 backend]$ npm i

added 95 packages, and audited 96 packages in 2s

16 packages are looking for funding
  run `npm fund` for details

5 vulnerabilities (2 moderate, 3 high)

To address all issues, run:
  npm audit fix

Run `npm audit` for details.
[ec2-user@ip-172-31-47-163 backend]$ node app.js
Listening on 5000
```
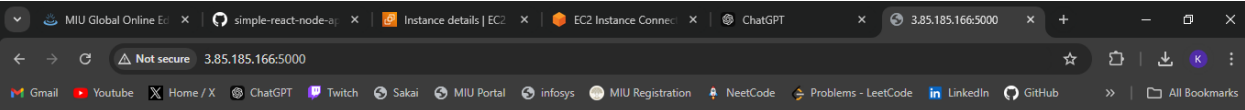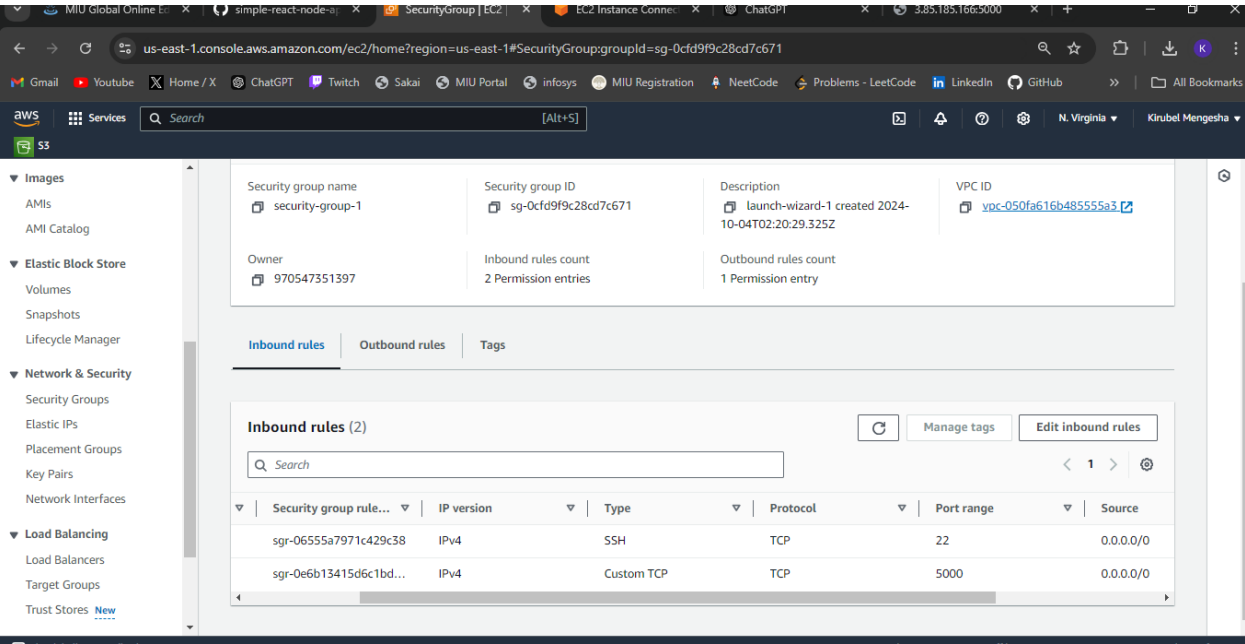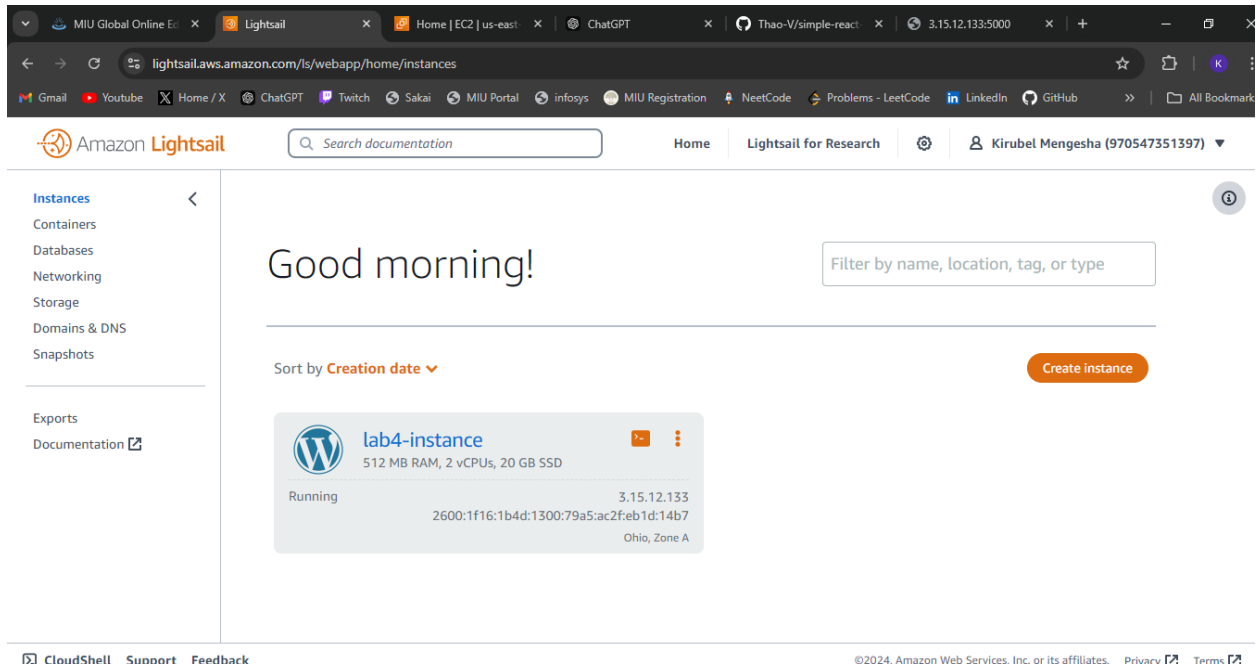
Not secure | 3.85.185.166:5000

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---

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#SecurityGroup:groupId=sg-0cfd9f9c28cd7c671

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aws | Services | Search [Alt+S] | N. Virginia | Kirubel Mengesha

S3

Images
AMIs
AMI Catalog

Elastic Block Store
Volumes
Snapshots
Lifecycle Manager

Network & Security
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces

Load Balancing
Load Balancers
Target Groups
Trust Stores New

Security group name	Security group ID	Description	VPC ID
security-group-1	sg-0cfd9f9c28cd7c671	launch-wizard-1 created 2024-10-04T02:20:29.325Z	vpc-050fa616b485555a3

Owner	Inbound rules count	Outbound rules count	
970547351397	2 Permission entries	1 Permission entry	

Inbound rules | **Outbound rules** | **Tags**

Inbound rules (2)

Manage tags | Edit inbound rules

Search

	Security group rule... ▽	IP version ▽	Type ▽	Protocol ▽	Port range ▽	Source
	sgr-06555a7971c429c38	IPv4	SSH	TCP	22	0.0.0.0/0
	sgr-0e6b13415d6c1bd...	IPv4	Custom TCP	TCP	5000	0.0.0.0/0

Task 2: Set Up an Amazon Lightsail Instance

lightsail.aws.amazon.com/ls/webapp/us-east-2/instances/lab4-instance/networking

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Amazon Lightsail

Search documentation

Home | Lightsail for Research | Kirubel Mengesha (970547351397)

Instances

Containers
Databases
Networking
Storage
Domains & DNS

Snapshots

Exports
Documentation
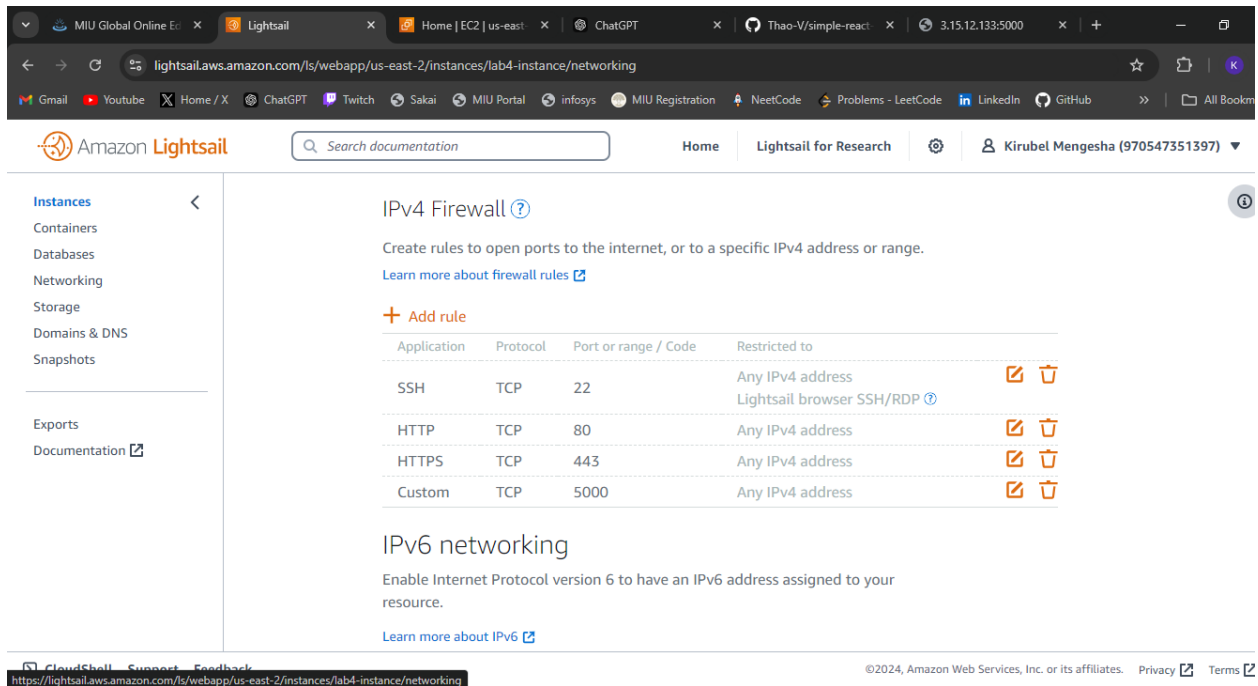
lab4-instance Info

512 MB RAM, 2 vCPUs, 20 GB SSD

Delete | Reboot | Stop

WordPress

Access WordPress Admin

AWS Region
Ohio, Zone A
(us-east-2a)

Networking type
Dual-stack
Change networking type

Public IPv4 address
3.15.12.133

Private IPv4 address
172.26.13.172

Public IPv6 address
2600:1f16:1b4d:1300:79a
5:ac2f:eb1d:14b7

Default WordPress admin user name
user

Default WordPress admin password
Retrieve default password

Instance status
Running

Connect | Metrics | Snapshots | Storage | **Networking** | Domains | Tags | History

CloudShell Support Feedback

https://lightsail.aws.amazon.com/ls/webapp/us-east-2/instances/lab4-instance/networking

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```
[PM2] Spawning PM2 daemon with pm2_home=/home/bitnami/.pm2
[PM2] PM2 Successfully daemonized
[PM2] Starting /home/bitnami/simple-react-node-app/backend/app.js in fork_mode (1 instance)
[PM2] Done.
```

id	name	namespace	version	mode	pid	uptime	↺	status	cpu	mem	user	watching
0	app	default	1.0.0	fork	9495	0s	0	online	0%	43.5mb	bitnami	disabled

Not secure 3.15.12.133:5000

Gmail | Youtube | Home / X | ChatGPT | Twitch | Sakai | MIU Portal | infosys | MIU Registration | NeetCode | Problems - LeetCode | LinkedIn | GitHub | All Bookmarks

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