

REACTJS

sudo npm install pm2 -g

```
devuser@server:/etc/nginx/sites-available$ sudo npm install pm2 -g
```

cd /var/www

sudo mkdir Lab3

```
devuser@server:~$ cd /var/www  
devuser@server:/var/www$ sudo mkdir Lab3
```

sudo chown -R \$USER:\$USER Lab3

cd Lab3

npx create-react-app my-react-app

cd my-react-app

```
devuser@server:/var/www$ sudo chown -R $USER:$USER Lab3
devuser@server:/var/www$ cd Lab3
devuser@server:/var/www/Lab3$ npx create-react-app my-react-app
Need to install the following packages:
create-react-app@5.0.1
Ok to proceed? (y) y
npm WARN deprecated tar@2.2.2: This version of tar is no longer supported, and will not receive security updates. Please upgrade asap.
Creating a new React app in /var/www/Lab3/my-react-app.
Installing packages. This might take a couple of minutes.
Installing react, react-dom, and react-scripts with cra-template...

added 1463 packages in 1m
242 packages are looking for funding
  run `npm fund` for details
Initialized a git repository.
Installing template dependencies using npm...
added 69 packages, and changed 1 package in 5s
246 packages are looking for funding
  run `npm fund` for details
Removing template package using npm...

removed 1 package, and audited 1532 packages in 6s
246 packages are looking for funding
  run `npm fund` for details
8 vulnerabilities (2 moderate, 6 high)
To address all issues (including breaking changes), run:
  npm audit fix --force
Run `npm audit` for details.
Created git commit.
Success! Created my-react-app at /var/www/Lab3/my-react-app
Inside that directory, you can run several commands:

  npm start
    Starts the development server.

  npm run build
    Bundles the app into static files for production.

  npm test
    Starts the test runner.

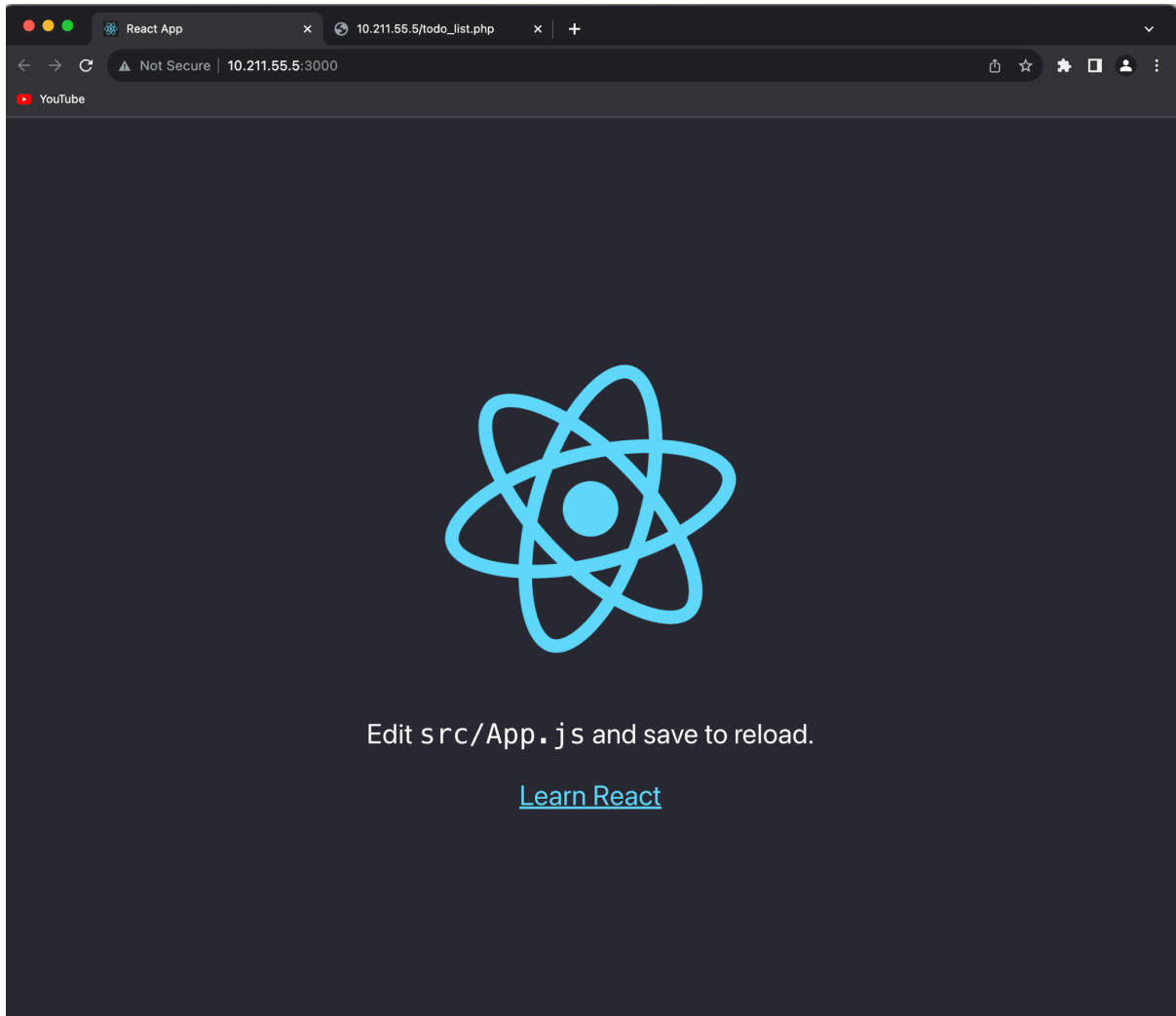
  npm run eject
    Removes this tool and copies build dependencies, configuration files
    and scripts into the app directory. If you do this, you can't go back!

We suggest that you begin by typing:

  cd my-react-app
  npm start

Happy hacking!
devuser@server:/var/www/Lab3$
```

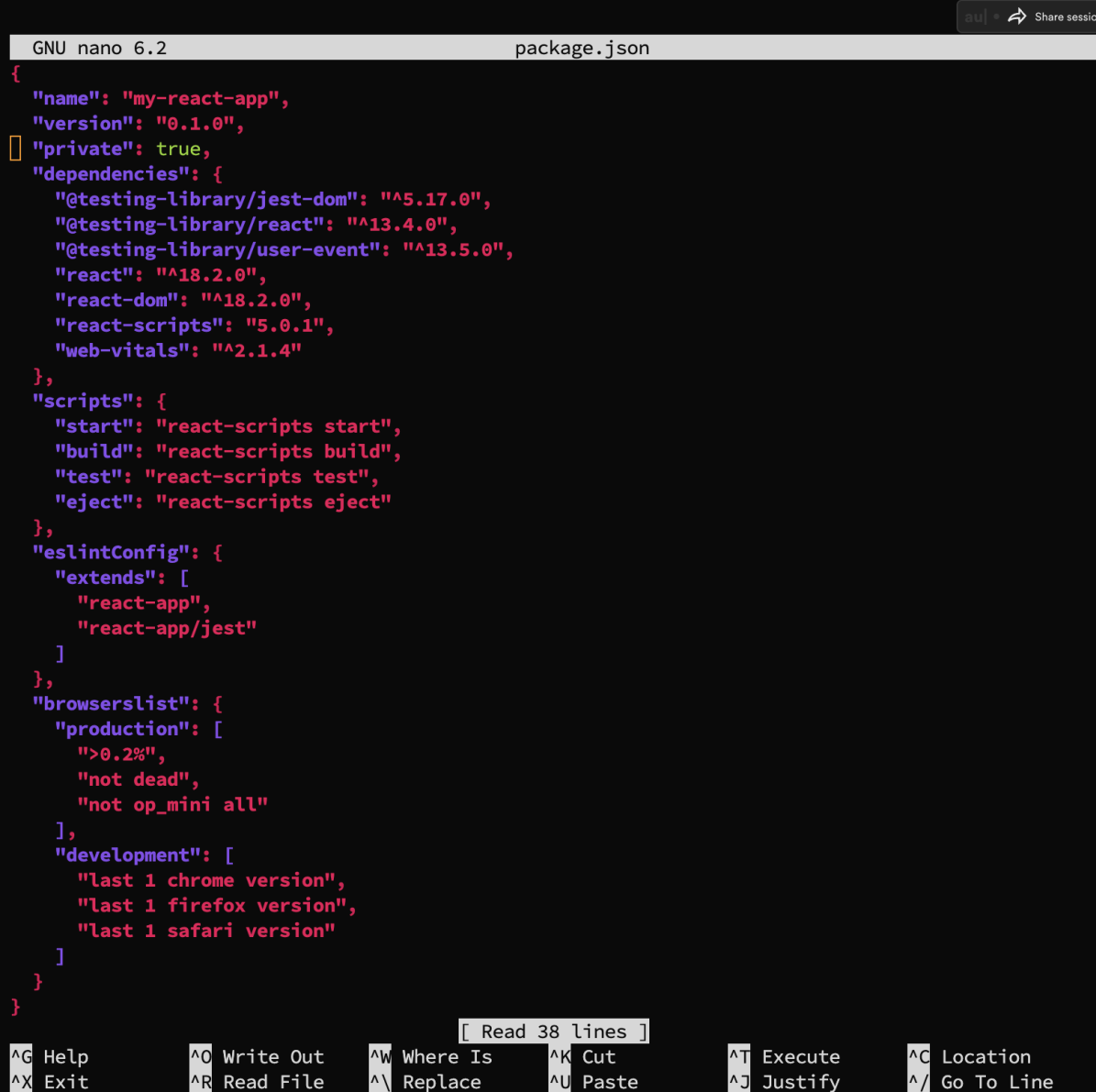
npm start



sudo nano package.json

```
devuser@server:/var/www/Lab3/my-react-app$ sudo nano package.json
```

edit port



```
GNU nano 6.2 package.json
{
  "name": "my-react-app",
  "version": "0.1.0",
  "private": true,
  "dependencies": {
    "@testing-library/jest-dom": "^5.17.0",
    "@testing-library/react": "^13.4.0",
    "@testing-library/user-event": "^13.5.0",
    "react": "^18.2.0",
    "react-dom": "^18.2.0",
    "react-scripts": "5.0.1",
    "web-vitals": "2.1.4"
  },
  "scripts": {
    "start": "react-scripts start",
    "build": "react-scripts build",
    "test": "react-scripts test",
    "eject": "react-scripts eject"
  },
  "eslintConfig": {
    "extends": [
      "react-app",
      "react-app/jest"
    ]
  },
  "browserslist": {
    "production": [
      ">0.2%",
      "not dead",
      "not op_mini all"
    ],
    "development": [
      "last 1 chrome version",
      "last 1 firefox version",
      "last 1 safari version"
    ]
  }
}
```

[Read 38 lines]

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^\\ Replace	^U Paste	^J Justify	^_ Go To Line

sudo ufw allow 3001

```
devuser@server:/var/www/Lab3/my-react-app$ sudo ufw allow 3001
Rule added
Rule added (v6)
devuser@server:/var/www/Lab3/my-react-app$
```

```
cd /etc/nginx/sites-available
```

```
sudo cp default my-react-app
```

```
devuser@server:~$ cd /etc/nginx/sites-available
devuser@server:/etc/nginx/sites-available$ sudo cp default my-react-app
```

```
sudo nano my-react-app
```

```
devuser@server:/etc/nginx/sites-available$ sudo nano my-react-app
```

```
server {
```

```
    listen 80;
```

```
    listen [::]:80;
```

```
    server_name my-react-app.se-rmutl.net;
```

```
    location / {
```

```
        proxy_pass http://127.0.0.1:3001; # !!! -
```

```
change to your app port
```

```
        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;
```

```
    }
```

}

```
server {
    listen 80;
    listen [::]:80;
    server_name my-react-app.se-rmutl.net;

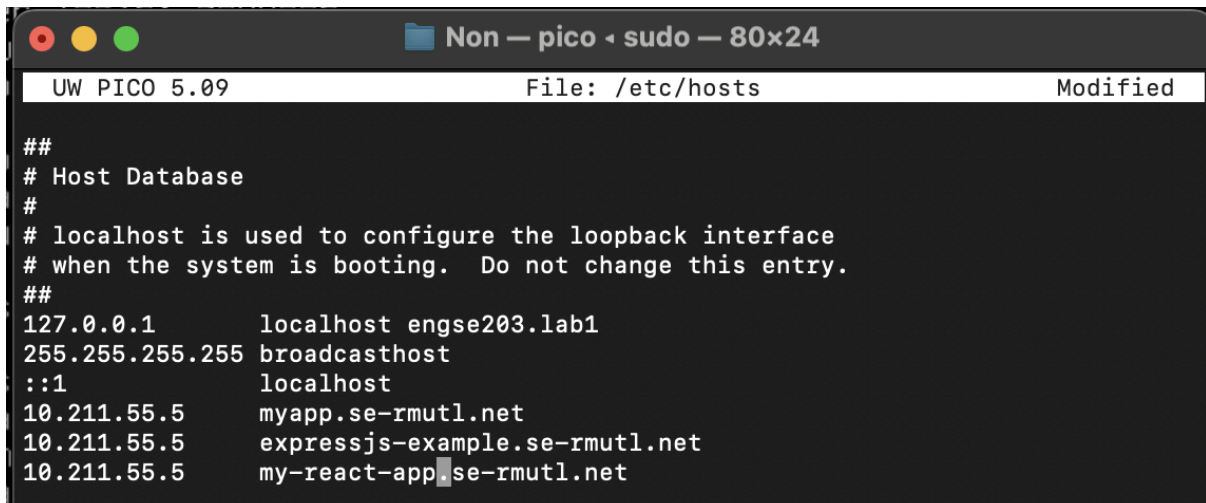
    location / {
        proxy_pass http://127.0.0.1:3001; # !!! - change to your app port
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
    }
}

# Virtual Host configuration for example.com
#
# You can move that to a different file under sites-available/ and symlink that
# to sites-enabled/ to enable it.
#
#server {
#    listen 80;
#    listen [::]:80;
#
#    server_name example.com;
#
#    root /var/www/example.com;
#    index index.html;
#
#    location / {
#        try_files $uri $uri/ =404;
#    }
#}
```

systemctl restart nginx.service

```
devuser@server:/etc/nginx/sites-available$ systemctl restart nginx.service
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to restart 'nginx.service'.
Multiple identities can be used for authentication:
 1. teerapong (devuser)
 2. teerapong,1,, (non)
Choose identity to authenticate as (1-2): 2
Password:
==== AUTHENTICATION COMPLETE ====
devuser@server:/etc/nginx/sites-available$
```

10.211.55.5 my-react-app.se-rmutl.net (edit in terminal -> sudo nano /etc/host)



```
Non — pico < sudo — 80x24
UW PICO 5.09 File: /etc/hosts Modified
##
# Host Database
#
# localhost is used to configure the loopback interface
# when the system is booting. Do not change this entry.
##
127.0.0.1    localhost engse203.lab1
255.255.255.255 broadcasthost
::1        localhost
10.211.55.5  myapp.se-rmutl.net
10.211.55.5  expressjs-example.se-rmutl.net
10.211.55.5  my-react-app.se-rmutl.net
```

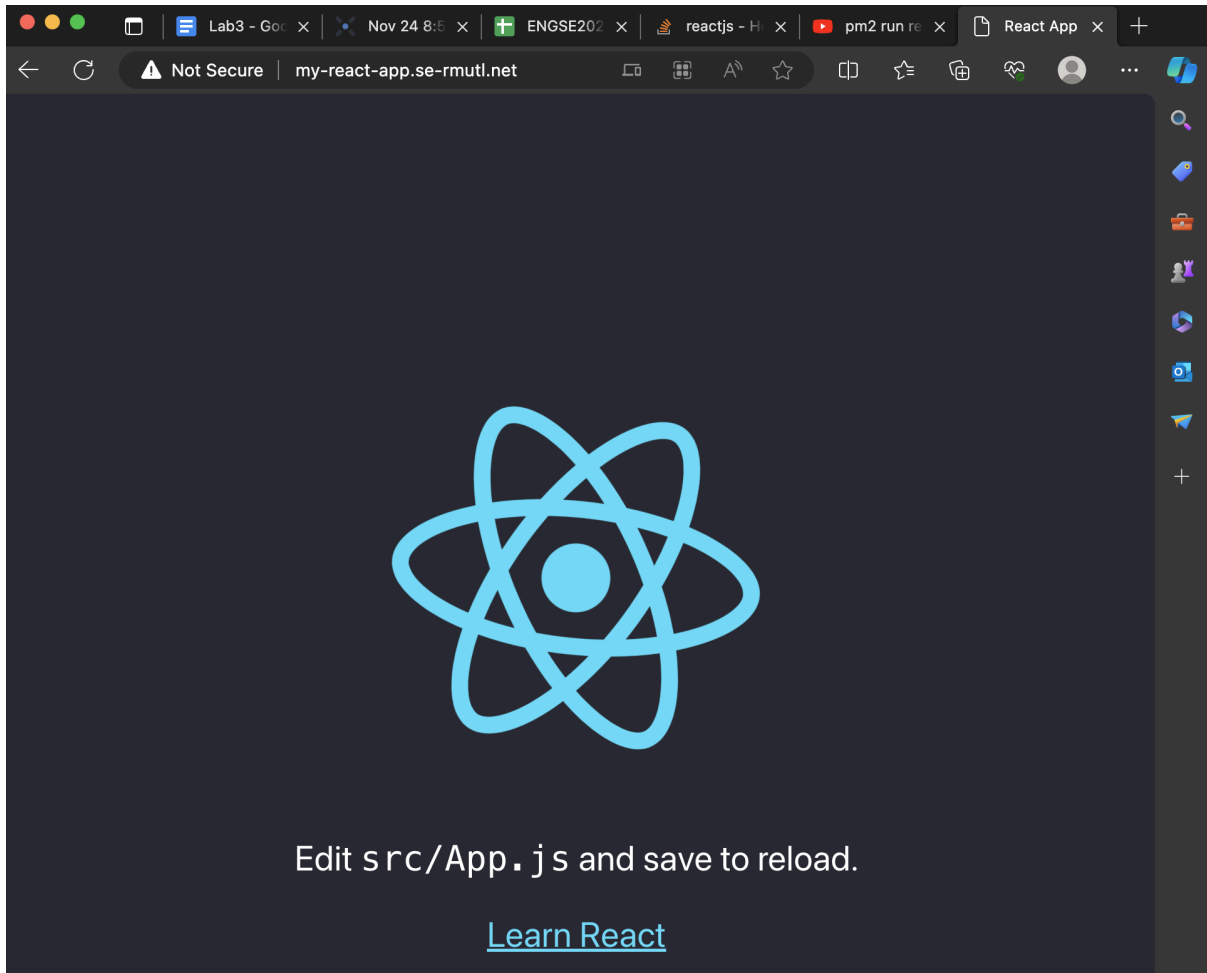
ping my-react-app.se-rmutl.net

```
Non@admins-iMac-3 ~ % ping my-react-app.se-rmutl.net
PING my-react-app.se-rmutl.net (10.211.55.5): 56 data bytes
64 bytes from 10.211.55.5: icmp_seq=0 ttl=64 time=0.412 ms
64 bytes from 10.211.55.5: icmp_seq=1 ttl=64 time=0.494 ms
64 bytes from 10.211.55.5: icmp_seq=2 ttl=64 time=0.500 ms
^C
--- my-react-app.se-rmutl.net ping statistics ---
3 packets transmitted, 3 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 0.412/0.469/0.500/0.040 ms
Non@admins-iMac-3 ~ %
```

```
cd /var/www/Lab3/my-react-app
```

```
devuser@server: /var/www/myapp$ cd /var/www/Lab3/my-react-app
```

```
npm start (run domain)
```



nextjs

cd /var/www/Lab3

npx create-next-app@latest ubuntu-next-app

```
devuser@server:/var/www/Lab3/my-react-app$ cd /var/www/Lab3
devuser@server:/var/www/Lab3$ npx create-next-app@latest ubuntu-next-app
Need to install the following packages:
create-next-app@14.0.4
Ok to proceed? (y) y
✓ Would you like to use TypeScript? ... No / Yes
✓ Would you like to use ESLint? ... No / Yes
✓ Would you like to use Tailwind CSS? ... No / Yes
✓ Would you like to use `src/` directory? ... No / Yes
✓ Would you like to use App Router? (recommended) ... No / Yes
✓ Would you like to customize the default import alias (@/*)? ... No / Yes
Creating a new Next.js app in /var/www/Lab3/ubuntu-next-app.

Using npm.

Initializing project with template: app-tw

Installing dependencies:
- react
- react-dom
- next

Installing devDependencies:
- typescript
- @types/node
- @types/react
- @types/react-dom
- autoprefixer
- postcss
- tailwindcss
- eslint
- eslint-config-next

added 333 packages, and audited 334 packages in 16s

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

found 0 vulnerabilities
Initialized a git repository.

Success! Created ubuntu-next-app at /var/www/Lab3/ubuntu-next-app
```

```
cd /var/www/Lab3
```

```
npx create-next-app@latest ubuntu-next-app
```

```
cd ubuntu-next-app
```

npm run build

```
devuser@server:/var/www/Lab3/my-react-app$ cd /var/www/Lab3
devuser@server:/var/www/Lab3$ npx create-next-app@latest ubuntu-next-app
Need to install the following packages:
create-next-app@14.0.4
Ok to proceed? (y) y
✓ Would you like to use TypeScript? ... No / Yes
✓ Would you like to use ESLint? ... No / Yes
✓ Would you like to use Tailwind CSS? ... No / Yes
✓ Would you like to use `src/` directory? ... No / Yes
✓ Would you like to use App Router? (recommended) ... No / Yes
✓ Would you like to customize the default import alias (@/*)? ... No / Yes
Creating a new Next.js app in /var/www/Lab3/ubuntu-next-app.
```

Using npm.

Initializing project with template: app-tw

Installing dependencies:

- react
- react-dom
- next

Installing devDependencies:

- typescript
- @types/node
- @types/react
- @types/react-dom
- autoprefixer
- postcss
- tailwindcss
- eslint
- eslint-config-next

added 333 packages, and audited 334 packages in 16s

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

found 0 vulnerabilities

Initialized a git repository.

Success! Created ubuntu-next-app at /var/www/Lab3/ubuntu-next-app

```
devuser@server:/var/www/Lab3$ cd ubuntu-next-app
```

```
devuser@server:/var/www/Lab3/ubuntu-next-app$ npm run build
```

```

> ubuntu-next-app@0.1.0 build
> next build

Attention: Next.js now collects completely anonymous telemetry regarding usage.
This information is used to shape Next.js' roadmap and prioritize features.
You can learn more, including how to opt-out if you'd not like to participate in this anonymous program, by visiting the following URL:
https://nextjs.org/telemetry

  ▲ Next.js 14.0.4

✓ Creating an optimized production build
✓ Compiled successfully
✓ Linting and checking validity of types
✓ Collecting page data
✓ Generating static pages (5/5)
✓ Collecting build traces
✓ Finalizing page optimization

Route (app)                Size      First Load JS
┌ ○ /                      5.16 kB    87 kB
└ ○ /_not-found            869 B      82.7 kB
+ First Load JS shared by all
  81.8 kB
├ chunks/938-5e061ba0d46125b1.js 26.7 kB
├ chunks/fd9d1056-735d320b4b8745cb.js 53.3 kB
├ chunks/main-app-6f5b7f54cc08e54c.js 220 B
└ chunks/webpack-327c219bf3d3ad2c.js 1.65 kB

○ (Static) prerendered as static content

```

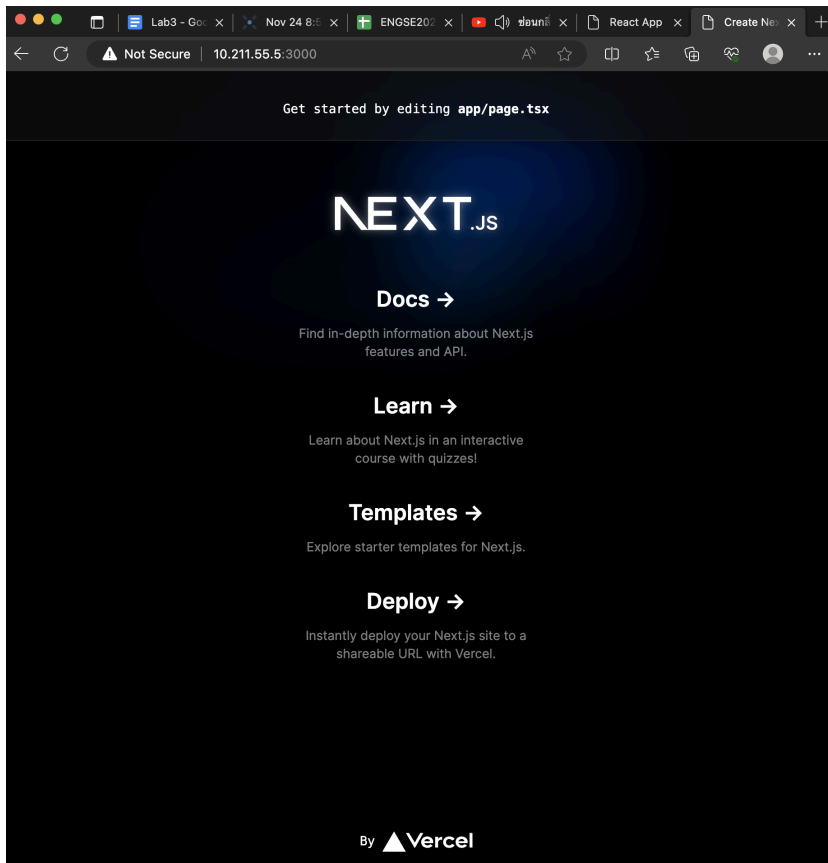
npm start

```
devuser@server: /var/www/Lab3/ubuntu-next-app$ npm start

> ubuntu-next-app@0.1.0 start
> next start

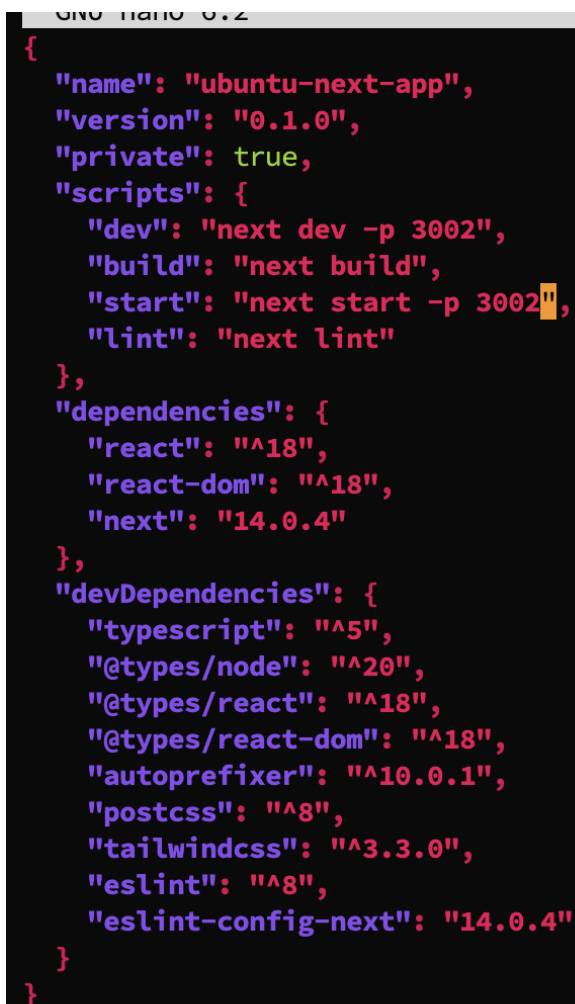
 ▲ Next.js 14.0.4
   - Local:      http://localhost:3000

✓ Ready in 209ms
```



sudo nano package.json

```
"scripts": {  
  "dev": "next dev -p 8080",  
  "start": "next start -p 8080",  
},
```



The screenshot shows a terminal window with the title 'GNU nano 0.2'. The content of the file is a JSON object for package.json. The text is as follows:

```
{  
  "name": "ubuntu-next-app",  
  "version": "0.1.0",  
  "private": true,  
  "scripts": {  
    "dev": "next dev -p 3002",  
    "build": "next build",  
    "start": "next start -p 3002",  
    "lint": "next lint"  
  },  
  "dependencies": {  
    "react": "^18",  
    "react-dom": "^18",  
    "next": "14.0.4"  
  },  
  "devDependencies": {  
    "typescript": "^5",  
    "@types/node": "^20",  
    "@types/react": "^18",  
    "@types/react-dom": "^18",  
    "autoprefixer": "^10.0.1",  
    "postcss": "^8",  
    "tailwindcss": "^3.3.0",  
    "eslint": "^8",  
    "eslint-config-next": "14.0.4"  
  }  
}
```

sudo ufw allow 3002

```
devuser@server:/var/www/Lab3/ubuntu-next-app$ sudo ufw allow 3002
Rule added
Rule added (v6)
```

cd /etc/nginx/sites-available

sudo cp default ubuntu-next-app

sudo nano ubuntu-next-app

```
devuser@server:~$ cd /etc/nginx/sites-available
devuser@server:/etc/nginx/sites-available$ sudo cp default ubuntu-next-app
devuser@server:/etc/nginx/sites-available$ sudo nano ubuntu-next-app
```

server {

listen 80;

listen [::]:80;

server_name ubuntu-next-app.se-rmutl.net;

location / {

proxy_pass http://127.0.0.1:3002; # !!! -

change to your app port

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;

}

}

```
GNU nano 6.2
server {
    listen 80;
    listen [::]:80;
    server_name ubuntu-next-app.se-rmutl.net;

    location / {
        proxy_pass http://127.0.0.1:3002; # !!! - change to your app port
        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;
    }
}

# Virtual Host configuration for example.com
#
# You can move that to a different file under sites-available/ and symlink that
# to sites-enabled/ to enable it.
#
#server {
#    listen 80;
#    listen [::]:80;
#
#    server_name example.com;
#
#    root /var/www/example.com;
#    index index.html;
#
#    location / {
#        try_files $uri $uri/ =404;
#    }
#}
```



```
sudo systemctl restart nginx
```

```
devuser@server:~$ sudo systemctl restart nginx
devuser@server:~$
```

10.211.55.5 ubuntu-next-app-rmutl.net (edit in terminal -> sudo nano /etc/host)

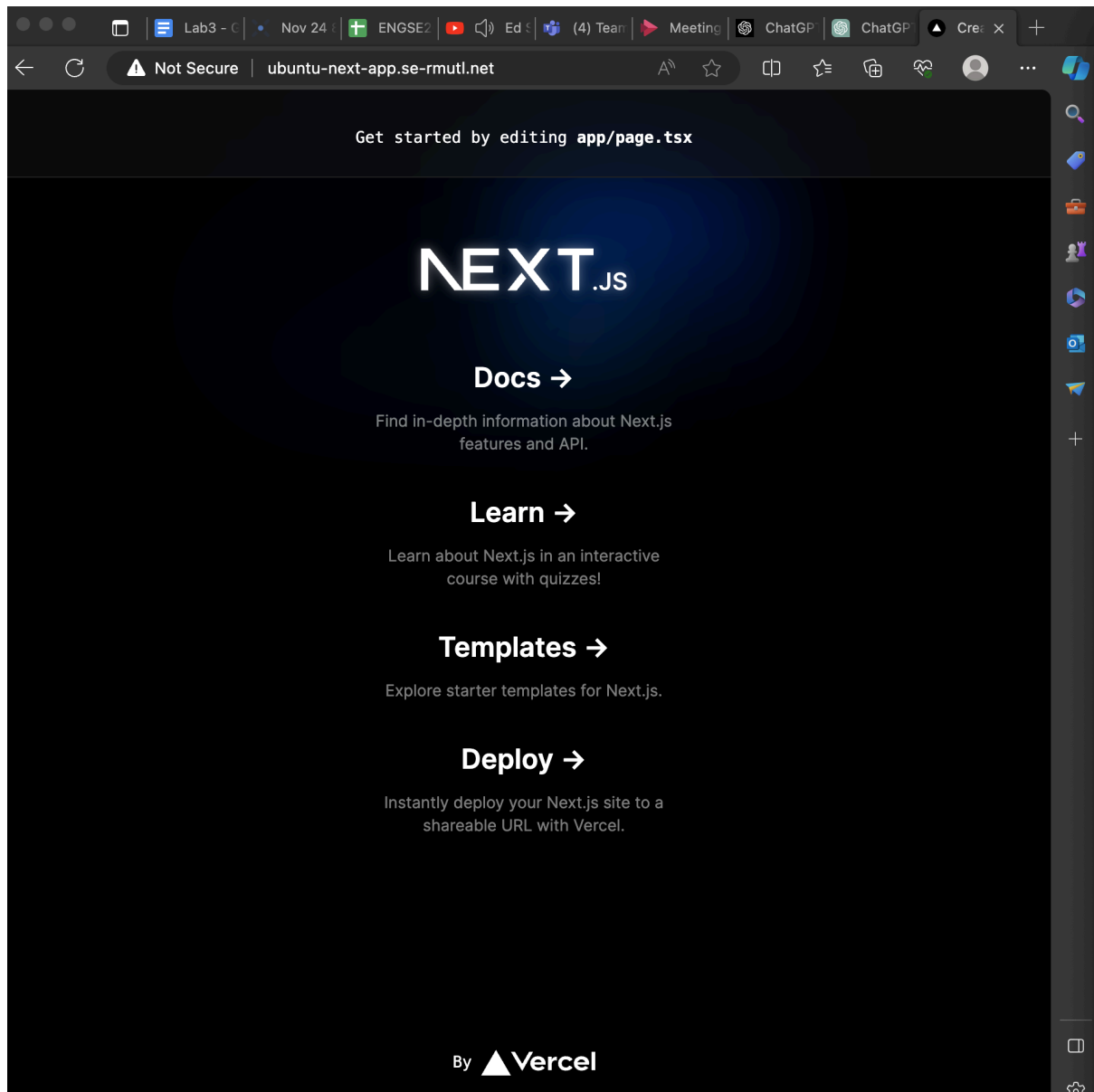
```
UW PICO 5.09
```

```
##  
# Host Database  
#  
# localhost is used to configure the loopback interface  
# when the system is booting. Do not change this entry.  
##  
127.0.0.1          localhost engse203.lab1  
255.255.255.255    broadcasthost  
::1               localhost  
10.211.55.5        myapp.se-rmutl.net  
10.211.55.5        expressjs-example.se-rmutl.net  
10.211.55.5        my-react-app.se-rmutl.net  
10.211.55.5        ubuntu-next-app.se-rmutl.net
```

```
cd /var/www/Lab3/my-react-app
```

```
devuser@server:~/var/www/Lab3/ubuntu-next-app$ cd
devuser@server:~$ cd /var/www/Lab3/ubuntu-next-app
devuser@server:/var/www/Lab3/ubuntu-next-app$
```

npm start (run domain)



[How to start Reactjs application with PM2 as a service \(Linux & MacOS\) | by Devesu | Medium](#)