

lab3

สร้างไดเรกทอรี lab3

- `sudo mkdir -p /var/www/lab3`
- `sudo chown -R $USER:$USER /var/www/expressjs-example`

```
devuser@server:~$ cd /var/www/lab3
devuser@server:/var/www/lab3$
```

ติดตั้ง reactjs

- `npx create-react-app my-react-app`

```
devuser@server:/var/www/lab3/my-react-app$ ls
node_modules  package.json  package-lock.json  public  README.md  src
devuser@server:/var/www/lab3/my-react-app$
```

เข้าไปแก้ไขไฟล์ package.json ในไดเรกทอรี my-react-app

- `sudo nano package.json`

```
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": "PORT=3001 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"
    ]
  }
}
```

เปิดไฟลวอให้ port 3001 และ 3002

```
devuser@server:/var/www/lab3/my-react-app$ sudo ufw allow 3001
Skipping adding existing rule
Skipping adding existing rule (v6)
devuser@server:/var/www/lab3/my-react-app$ sudo ufw allow 3002
Rule added
Rule added (v6)
devuser@server:/var/www/lab3/my-react-app$
```

run app sever

```
Compiled successfully!

You can now view my-react-app in the browser.

  Local:           http://localhost:3001
  On Your Network: http://10.211.55.7:3001

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

คัดลอกไฟล์ myapp เป็น react

- `sudo cp myapp react`

```
devuser@server:/etc/nginx/sites-available$ ls
default expressjs-example myapp
devuser@server:/etc/nginx/sites-available$ sudo cp myapp react
[sudo] password for devuser:
devuser@server:/etc/nginx/sites-available$ ls
default expressjs-example myapp react
devuser@server:/etc/nginx/sites-available$
```

แก้ไขไฟล์ react

- `sudo nano react`

```
GNU nano 6.2 react
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;
#    }
#}
```

แก้ไขไฟล์ใน terminal

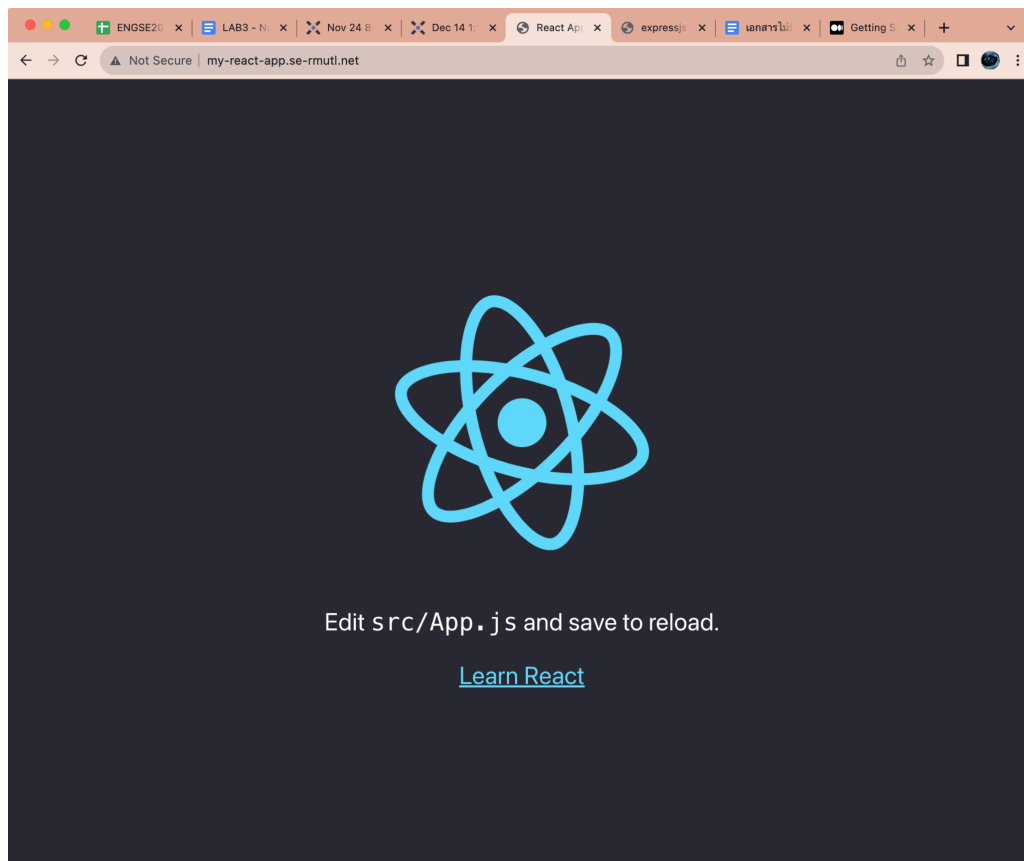
- sudo nano /etc/hosts

```
admin — 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
10.211.55.7    myapp.se-rmutl.net
10.211.55.7    expressjs-example.se-rmutl.net
10.211.55.7    my-react-app.se-rmutl.net
10.211.55.7    ubuntu-next-app.se-rmutl.net

^G Get Help ^O WriteOut ^R Read File ^Y Prev Pg ^K Cut Text ^C Cur Pos
^X Exit     ^J Justify  ^W Where is ^V Next Pg ^U UnCut Text ^T To Spell
```

ผลลัพธ์



ติดตั้ง nextjs

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

```
devuser@server:/var/www/lab3/my-react-app$ cd ..
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 14s

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

found 0 vulnerabilities

Success! Created ubuntu-next-app at /var/www/lab3/ubuntu-next-app

```
devuser@server:/var/www/lab3$ ls
```

```
my-react-app  ubuntu-next-app
```

```
devuser@server:/var/www/lab3$ cd ubuntu-next-app/
```

```
devuser@server:/var/www/lab3/ubuntu-next-app$ ls
```

```
app                node_modules      postcss.config.js  tailwind.config.ts
next.config.js     package.json      public             tsconfig.json
next-env.d.ts      package-lock.json README.md
```

```
devuser@server:/var/www/lab3/ubuntu-next-app$ sudo nano package.json
```

เข้าไปแก้ไขไฟล์ package.json ในไดเรกทอรี ubuntu-next-app

- sudo nano package.json

```
GNU nano 6.2 package.json
{
  "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"
  }
}
```

```
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-b0baefae49ce51a1.js	220 B	
└ chunks/webpack-327c219bf3d3ad2c.js	1.65 kB	

○ (Static) prerendered as static content

คัดลอกไฟล์ react เป็น next

- sudo cp react next

```
devuser@server:/var/www/lab3/my-react-app$ cd /var/www/lab3/
my-react-app/      ubuntu-next-app/
devuser@server:/var/www/lab3/my-react-app$ cd /var/www/lab3/ubuntu-next-app/
devuser@server:/var/www/lab3/ubuntu-next-app$ sudo nano package.json
devuser@server:/var/www/lab3/ubuntu-next-app$ cd /etc/nginx/sites-available/
devuser@server:/etc/nginx/sites-available$ sudo cp react next
devuser@server:/etc/nginx/sites-available$ sudo nano next
```

แก้ไขไฟล์react

- sudo nano react

```
GNU nano 6.2                                next *
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;
#    }
#}
```

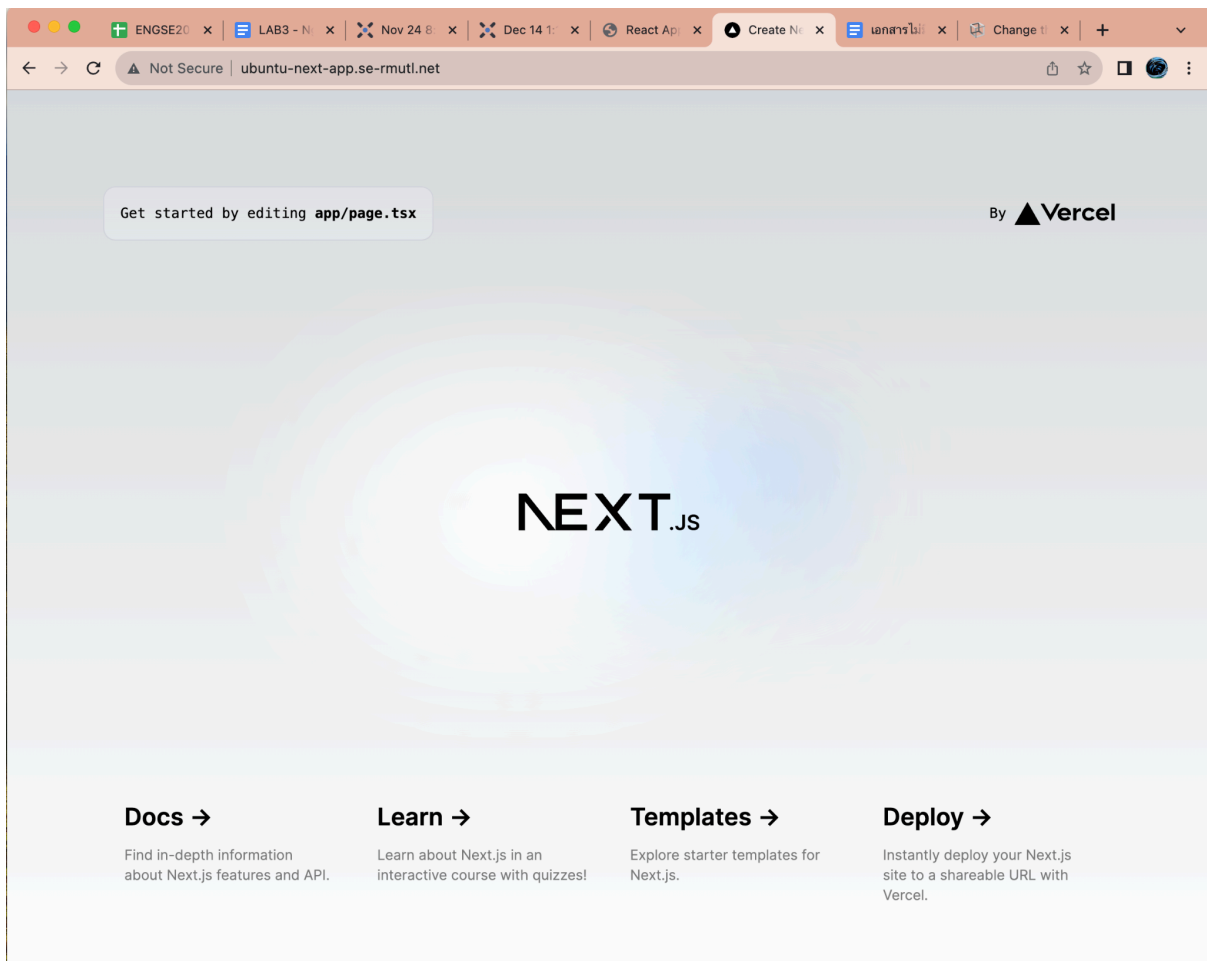


```
admin — pico — sudo — 80x24
UW PICO 5.09 File: /etc/hosts Modified

##
# Host Database
#
# localhost is used to configure the loopback interface
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##
127.0.0.1    localhost engse203.lab1
255.255.255.255 broadcasthost
::1         localhost
10.211.55.7  myapp.se-rmutl.net
10.211.55.7  expressjs-example.se-rmutl.net
10.211.55.7  my-react-app.se-rmutl.net
10.211.55.7  ubuntu-next-app.se-rmutl.net

^G Get Help ^O WriteOut ^R Read File ^Y Prev Pg ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where is ^V Next Pg ^U UnCut Text ^T To Spell
```

ผลลัพธ์



ติดตั้ง pm2

```
devuser@nginxserver:~$ sudo npm install pm2 -g
[sudo] password for devuser:
( ) .: idealTree:semver: timing idealTree:node_modules/pm2/
```

run pm2 react app

```
Last login: Sat Dec 16 05:53:05 2023 from 192.168.56.1
devuser@nginxserver:~$ cd /var/www/lab3/my-react-app/
devuser@nginxserver:/var/www/lab3/my-react-app$ pm2 start --name my-react-app
npm -- start
```

```
[PM2] Spawning PM2 daemon with pm2_home=/home/devuser/.pm2
[PM2] PM2 Successfully daemonized
[PM2] Starting /usr/bin/npm in fork_mode (1 instance)
[PM2] Done.
```

id	name	mode	🔄	status	cpu	memory
0	my-react-app	fork	0	online	0%	18.6mb

← ↻ ⚠ Not secure | my-react-app.se-rmutl.net



Edit src/App.js and save to reload.

[Learn React](#)


run pm2 next app

```
devuser@nginxserver:/var/www/lab3/my-react-app$ cd /var/www/lab3/ubuntu-next-app/
devuser@nginxserver:/var/www/lab3/ubuntu-next-app$ pm2 start --name ubuntu-next-app npm -- start
[PM2] Starting /usr/bin/npm in fork_mode (1 instance)
[PM2] Done.
```

id	name	mode	↻	status	cpu	memory
0	my-react-app	fork	1	online	0%	69.6mb
1	ubuntu-next-app	fork	0	online	0%	4.0kb

← ↻ ⚠ Not secure | ubuntu-next-app.se-rmutl.net

Get started by editing `app/page.tsx`

By  Vercel

NEXT.js

Docs →

Find in-depth information about Next.js features and API.

Learn →

Learn about Next.js in an interactive course with quizzes!

Templates →

Explore starter templates for Next.js.

Deploy →

Instantly deploy your Next.js site to a shareable URL with Vercel.