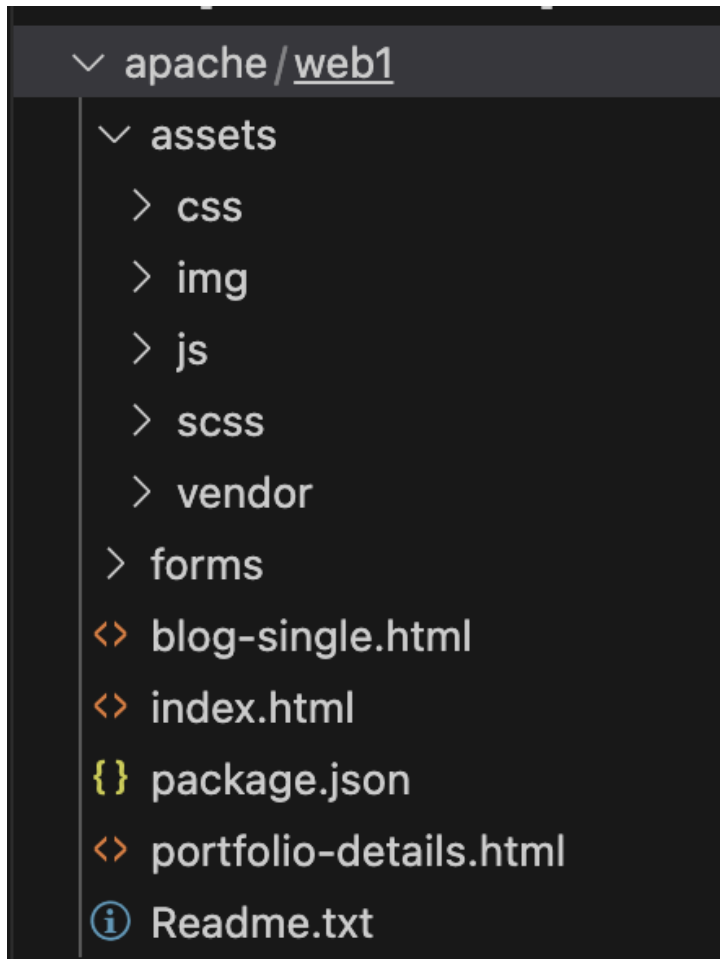


สร้าง folder apache และ nginx และทำการ chown

```
lertpisit@webserver-66543210001:/var/www$ sudo mkdir apache
lertpisit@webserver-66543210001:/var/www$ sudo mkdir nginx
lertpisit@webserver-66543210001:/var/www$ sudo chown -R $USER:$USER /var/www/apache/
lertpisit@webserver-66543210001:/var/www$ sudo chown -R $USER:$USER /var/www/nginx/
lertpisit@webserver-66543210001:/var/www$ ls -l
```

โหลด template มาลง



Copy 000-default.conf to web1.conf และ ทำการแก้ไข web1.conf

```
lertpisit@webserver-66543210001:/var/www/apache/web1$ cd /etc/apache2/sites-available/
lertpisit@webserver-66543210001:/etc/apache2/sites-available$ sudo cp 000-default.conf web1.conf
lertpisit@webserver-66543210001:/etc/apache2/sites-available$ ls
000-default.conf  default-ssl.conf  web1.conf
```

```
lertpisit@webserver-66543210001:/etc/apache2/sites-available$ sudo nano web1.conf
```

```
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname and port that
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual hosts, the ServerName
    # specifies what hostname must appear in the request's Host: header to
    # match this virtual host. For the default virtual host (this file) this
    # value is not decisive as it is used as a last resort host regardless.
    # However, you must set it for any further virtual host explicitly.
    #ServerName www.example.com

    ServerAdmin webmaster@apache
    ServerName apache
    serverAlias www.apache
    DocumentRoot /var/www/apache/web1

    # Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
    # error, crit, alert, emerg.
    # It is also possible to configure the loglevel for particular
    # modules, e.g.
    #LogLevel info ssl:warn

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

    # For most configuration files from conf-available/, which are
    # enabled or disabled at a global level, it is possible to
    # include a line for only one particular virtual host. For example the
    # following line enables the CGI configuration for this host only
    # after it has been globally disabled with "a2disconf".
    #Include conf-available/serve-cgi-bin.conf
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

```
ServerAdmin webmaster@apache
ServerName apache
serverAlias www.apache
DocumentRoot /var/www/apache/web1
```

Enable web1

```
lertpisit@webserver-66543210001:/var/www/apache/web1$ sudo a2ensite web1
Enabling site web1.
To activate the new configuration, you need to run:
    systemctl reload apache2
```

```
lertpisit@webserver-66543210001:/var/www/apache/web1$ sudo systemctl reload apache2
```

Disable 000-default

```
lertpisit@webserver-66543210001:/var/www/apache/web1$ sudo a2disssite 000-default
Site 000-default disabled.
To activate the new configuration, you need to run:
    systemctl reload apache2
```

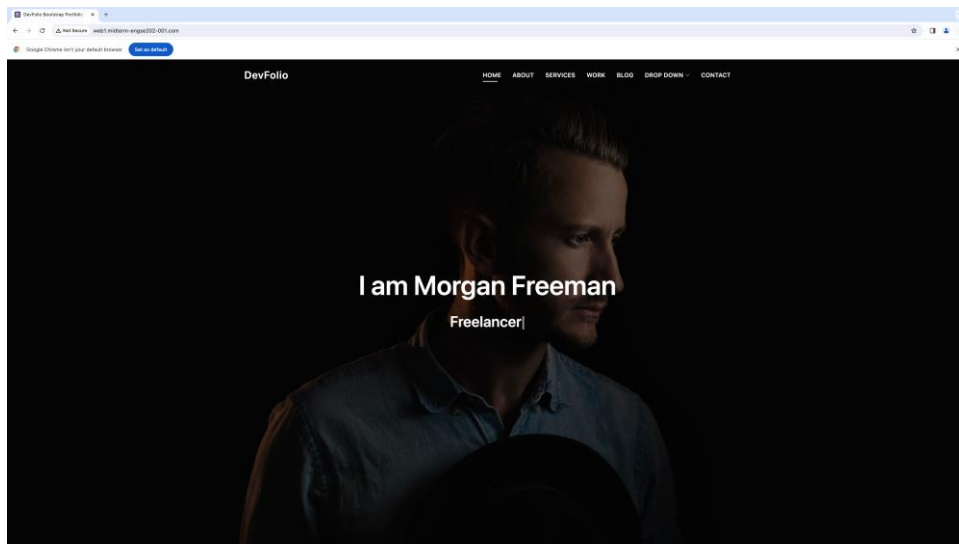
```
lertpisit@webserver-66543210001:/var/www/apache/web1$ sudo systemctl reload apache2
```

ไปที่ mac และแก้ไข hosts

```
admin@admins-iMac ~ % sudo nano /etc/hosts
```

```
10.211.55.5 web1.midterm-engse202-001.com
```

เข้า domain



โหลด template มาลง

```
✓ nginx/web2
  ✓ assets
    > css
    > img
  ✓ js
    JS main.js
    > scss
    > vendor
  > forms
  <> index.html
  <> inner-page.html
  <> portfolio-details.html
  ⓘ Readme.txt
```

แก้ไขไฟล์ nginx.conf

```
lertpisit@webserver-66543210001:/etc/apache2/sites-available$ cd /etc/nginx/sites-available
lertpisit@webserver-66543210001:/etc/nginx/sites-available$
```

```
lertpisit@webserver-66543210001:/etc/nginx$ sudo nano nginx.conf
```

ก่อน

```
include /etc/nginx/conf.d/*.conf;
include /etc/nginx/sites-enabled/*;
```

หลัง

```
include /etc/nginx/conf.d/*.conf;
include /etc/nginx/sites-available/*;
```

Copy default to web2 และ ทำการแก้ไข web2

```
lertpisit@webserver-66543210001:/etc/apache2/sites-available$ cd /etc/nginx/sites-available
```

```
lertpisit@webserver-66543210001:/etc/nginx/sites-available$ sudo nano web2
```

```
server {
    listen 81 default_server;
    listen [::]:81 default_server;

    # SSL configuration
    #
    # listen 443 ssl default_server;
    # listen [::]:443 ssl default_server;
    #
    # Note: You should disable gzip for SSL traffic.
    # See: https://bugs.debian.org/773332
    #
    # Read up on ssl_ciphers to ensure a secure configuration.
    # See: https://bugs.debian.org/765782
    #
    # Self signed certs generated by the ssl-cert package
    # Don't use them in a production server!
    #
    # include snippets/snakeoil.conf;

    root /var/www/nginx/web2/;
```

เปิด port 81

```
lertpisit@webserver-66543210001:/etc/nginx/sites-available$ sudo ufw allow 81
Rule added
Rule added (v6)
```

Remove file default

```
lertpisit@webserver-66543210001:/etc/nginx/sites-available$ sudo rm default
```

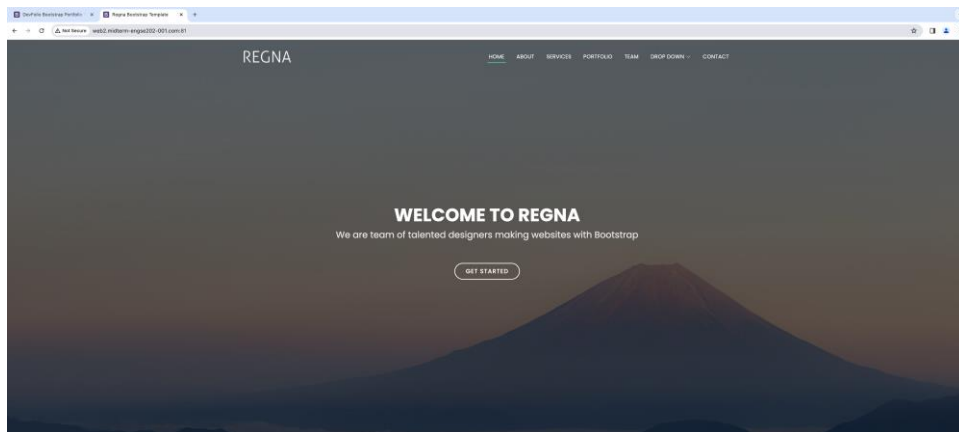
```
lertpisit@webserver-66543210001:/etc/nginx/sites-enabled$ sudo rm default
```

ไปที่ mac และแก้ไข hosts

```
admin@admin-s-iMac ~ % sudo nano /etc/hosts
```

```
10.211.55.5 web1.midterm-engse202-001.com web2.midterm-engse202-001.com
```

เข้า domain



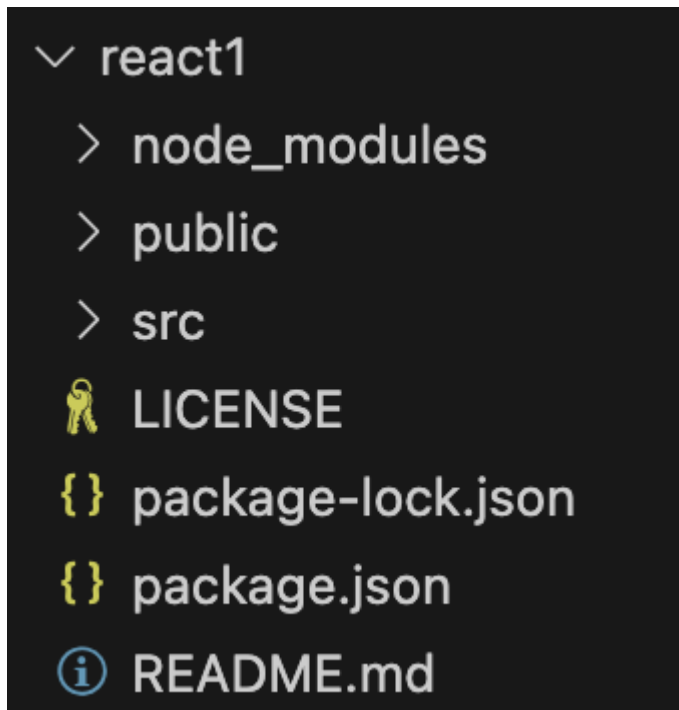
สร้าง folder react1 ,react2

```
lertpisit@webserver-66543210001:/etc/nginx/sites-available$ cd /var/www/nginx/  
lertpisit@webserver-66543210001:/var/www/nginx$ mkdir react1  
lertpisit@webserver-66543210001:/var/www/nginx$ mkdir react2  
lertpisit@webserver-66543210001:/var/www/nginx$ ls  
react1 react2 web2
```

ไปที่ mac และแก้ไข hosts

```
10.211.55.5 web1.midterm-engse202-001.com web2.midterm-engse202-001.com react1.midterm-engse202-001.com react2.midterm-engse202-001.com
```

โหลด template react มาลง



กำหนด port 3010

```
"scripts": {  
  "start": "export PORT=3010 SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts start",  
  "build": "export SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts GENERATE_SOURCEMAP=false react-scripts build",  
  "test": "react-scripts test",  
  "eject": "react-scripts eject"  
}
```

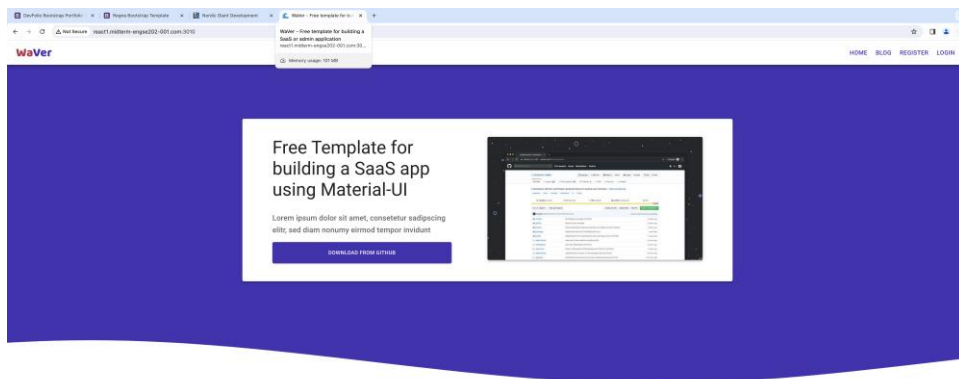
ลง npm

```
lertpisit@webserver-66543210001:/var/www/nginx/react1$ npm install
```

เปิด port 3010

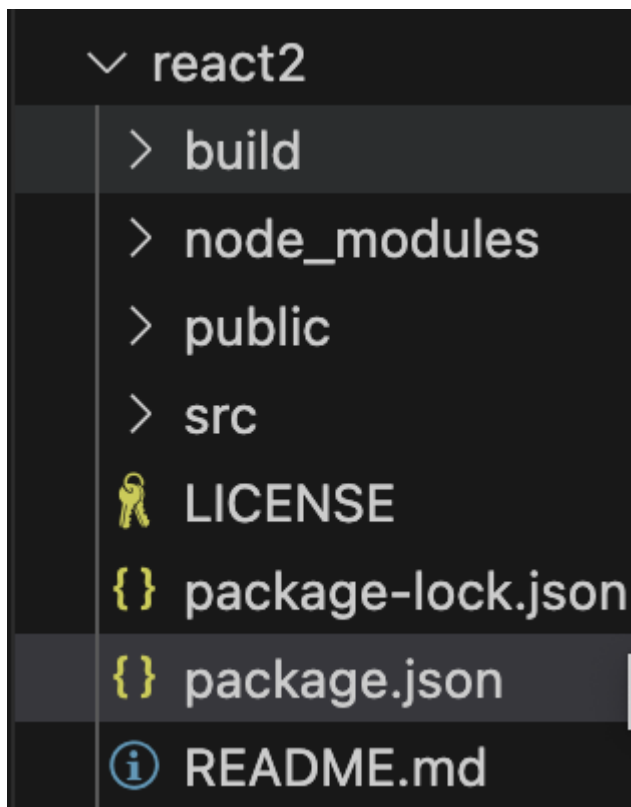
```
lertpisit@webserver-66543210001:/var/www/nginx/react1$ sudo ufw allow 3010  
Rule added  
Rule added (v6)
```

เข้า domain



Features

โหลด template react มาลง



กำหนด port 3011

```
"scripts": {
  "start": "export PORT=3011 SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts start",
  "build": "export SET NODE_OPTIONS=--openssl-legacy-provider && react-scripts GENERATE_SOURCEMAP=false react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject"
}
```

เปิด port 3011

```
Rule added (v6)
lertpisit@webserver-66543210001:/var/www/nginx/react2$ sudo ufw allow 3011
Rule added
Rule added (v6)
```

npm i

```
lertpisit@webserver-66543210001:/var/www/nginx/react2$ npm i
```

แก้ไข react2

```
lertpisit@webserver-66543210001:/etc/nginx/sites-available$ sudo nano react2
```

```
GNU nano 6.2 react2 *
server {
    listen 81;
    listen [::]:81;

    server_name react2.midterm-engse202-001.com;

    location / {
        proxy_pass http://127.0.0.1:3011;
        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;
    }
}
```


เข้า domain

