

React APP deployment on EC2

EC2 instance

- follow the instructions for creating a new instance with following parameters
 - **AMI:** ubuntu 20.04
 - **EC2 instance type:** t2.micro
 - **tags:** Name: test-machine
 - **pem file:** RSA
- download the pem file and change the permissions

```
> sudo chmod 400 <filename>
```

apache2

- install apache

```
> sudo apt-get update
> sudo apt-get install apache2
```

- enable htaccess
 - add following code in /etc/apache2/sites-enabled/000-default.conf

```
<VirtualHost *:80>
    ServerAdmin webmaster@localhost
    DocumentRoot /var/www/html

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

    <Directory /var/www/html>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride All
        Require all granted
    </Directory>
</VirtualHost>
```

- add following in /var/www/html/.htaccess

```
RewriteEngine on
```

```
# Don't rewrite files or directories
RewriteCond %{REQUEST_FILENAME} -f [OR]
RewriteCond %{REQUEST_FILENAME} -d
RewriteRule ^ - [L]

# Rewrite everything else to index.html to allow html5 state
links
RewriteRule ^ index.html [L]
```

- restart apache

```
> sudo a2enmod rewrite
> sudo systemctl reload apache2
> sudo systemctl restart apache2
```

mysql

- install mysql

```
> sudo apt update
> sudo apt install -y mysql-server
```

- change the root password

```
> sudo mysql
> ALTER USER 'root'@'localhost' IDENTIFIED WITH
mysql_native_password BY 'root';
> FLUSH PRIVILEGES;
> exit;
```

React app

- execute the following steps on your machine
 - build the application

```
> yarn build
```

- archive the build directory contents
- upload the archived file to server

```
> scp -i <pem file location> build/Archived.zip ubuntu@<public
ip>:~/
```

- execute the following steps on the server (ec2) machine

```
> cd /var/www/html  
> sudo rm -f *  
> sudo mv ~/Archived.zip .  
> sudo apt-get install unzip  
> sudo unzip Archived.zip
```

nodejs

```
> curl -fsSL https://deb.nodesource.com/setup_16.x | sudo -E bash -  
> sudo apt-get update  
> sudo apt install -y nodejs  
> node --version
```