**SSL Certificate - React Application**

**Step 1: Set Up EC2 Instance**

1. **Connect to Your EC2 Instance:**
   * Open your terminal.
   * Connect to your EC2 instance using SSH:

ssh -i "your-key.pem" ubuntu@your-ec2-public-dns

**Step 2: Install Node.js and npm**

1. **Update the package index:**

sudo apt update

1. **Install Node.js:**

curl -sL https://deb.nodesource.com/setup\_14.x | sudo -E bash - sudo apt install -y nodejs

1. **Verify the installation:**

node -v

npm -v

**Step 3: Set Up a Sample React Application**

1. **Create a new React app:**

npx create-react-app my-react-app

1. **Navigate to the app directory:**

cd my-react-app

1. **Start the React app:**

npm start

**Step 4: Install Nginx**

1. **Install Nginx:**

sudo apt install nginx

1. **Configure Nginx for your React app:**
   * Open the default Nginx configuration file:

sudo nano /etc/nginx/sites-available/default

* + Replace the content with the following:

server {

listen 80;

server\_name sample.nquantum.in;

location / {

root /var/www/html/my-react-app/build;

try\_files $uri /index.html;

}

}

**Build your React app for production:**

npm run build

1. **Move the build files to the Nginx root directory:**

sudo mv build /var/www/html/my-react-app

1. **Restart Nginx:**

sudo systemctl restart nginx

**Step 5: Configure Domain from GoDaddy**

1. **Login to your GoDaddy account.**
2. **Navigate to your Domain Settings.**
3. **Find the DNS Management section.**
4. **Add an A Record:**
   * Name: @
   * Value: Your EC2 instance’s public IP address
   * TTL: 1 Hour
5. **Add a CNAME Record (Optional for www subdomain):**
   * Name: www
   * Value: @
   * TTL: 1 Hour

**Step 6: Install Certbot for SSL**

1. **Add Certbot PPA:**

sudo apt install software-properties-common sudo add-apt-repository universe sudo add-apt-repository ppa:certbot/certbot

sudo apt update

1. **Install Certbot:**

sudo apt install certbot python3-certbot-nginx

1. **Obtain an SSL certificate:**

sudo certbot --nginx -d your-domain.com

1. **Follow the prompts to configure SSL.**

**Step 7: Verify SSL Configuration**

1. **Check the SSL configuration:**

sudo nginx -t

1. **Reload Nginx:**

sudo systemctl reload nginx

1. **Ensure SSL auto-renewal:**

sudo certbot renew --dry-run

**Final Steps: Test Your Setup**

1. **Open a browser and navigate to** **https://your-domain.com**.
2. **Ensure your React application is running securely with HTTPS.**