Next.js project on server

To deploy your Next.js project on server using Nginx and set it up with an SSL certificate for your domain follow these steps:

Step 1: Install Node.js and NPM

1. Connect to your server using SSH:

```
ssh root@IP.Address
```

2. Update your package index and install Node.js and npm:

```
sudo apt update
sudo apt install nodejs npm -y
```

3. Verify the installation:

```
node -v
npm -v
```

Step 2: Install and Build Your Next.js Application

1. Navigate to your project directory:

```
cd /root/project-directory
```

2. Install dependencies:

```
npm install
```

3. Build the project:

```
npm run build
```

4. Start the application to test it:

```
npm start
```

By default, this will run on `localhost:3000`. You can check if the app is running by visiting `http://IP Address:3000`.

Step 3: Set Up PM2 to Keep the App Running

1. Install PM2 globally:

```
sudo npm install -g pm2
```

2. Start the Next.js app with PM2:

```
pm2 start npm --name "cs-server-hub" -- start
```

3. Save the PM2 process list and enable startup script:

```
pm2 save
pm2 startup
```

Step 4: Install and Configure Nginx

1. Install Nginx:

```
sudo apt install nginx -y
```

2. Create a new Nginx configuration file for your domain:

```
sudo nano /etc/nginx/sites-available/uizb210.xyz
```

3. Add the following configuration to set up reverse proxy for the Next.js app:

```
server {
    listen 80;
    server_name uizb210.xyz www.uizb210.xyz;

    location / {
        proxy_pass http://localhost:3000;
        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;
```

```
        }
    }
```

4. Enable the configuration by creating a symbolic link:

```
sudo ln -s /etc/nginx/sites-available/uizb210.xyz /etc/nginx/sites-enabled/
```

5. Test the Nginx configuration:

```
sudo nginx -t
```

6. Reload Nginx to apply the changes:

```
sudo systemctl restart nginx
```

Step 5: Obtain an SSL Certificate with Certbot

1. Install Certbot and the Nginx plugin:

```
sudo apt install certbot python3-certbot-nginx -y
```

2. Run Certbot to obtain and install the SSL certificate:

```
sudo certbot --nginx -d uizb210.xyz -d www.uizb210.xyz
```

3. Follow the prompts to complete the SSL certificate installation. Certbot will automatically configure SSL in your Nginx config.

4. Test automatic renewal by simulating a Certbot renewal:

```
sudo certbot renew --dry-run
```

Step 6: Final Verification

1. Go to `https://uizb210.xyz` in your browser to verify that your site is accessible over HTTPS.

2. Ensure that the PM2 process for your Next.js app is running by checking:

```
pm2 list
```

Your Next.js app should now be live on your domain with HTTPS enabled!