

# Use Node.js and Express.js with Nginx on a VM using GitHub to deployment

## 1. Prepare VM

- **Update and install necessary packages:**

- `sudo apt update && sudo apt upgrade -y`  
`sudo apt install git nodejs npm nginx -y`

- **Verify Node.js and npm installation:**

- `node -v`  
`npm -v`

- **Install a process manager like PM2:**

- `sudo npm install -g pm2`
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## 2. Clone and Set Up Project

- **Navigate to the desired directory:**

- `cd /var/www`

- **Clone your project repository:**

- `git clone https://github.com/RosCheath/rupp-e-card.git`  
`cd rupp-e-card`

- **Install dependencies:**

- `npm install`

- **Run the app with PM2:**

- ```
cd src
pm2 start app.js --name rupp-e-card
pm2 save
pm2 startup
```

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## 3. Configure Nginx as a Reverse Proxy

- **Create an Nginx configuration file for domain:**

- ```
sudo nano /etc/nginx/sites-available/verify.rupp.edu.kh
```

- **Add the following content:**

- ```
server {
    server_name verify.rupp.edu.kh;

    location / {
        proxy_pass http://127.0.0.1:3000;
        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;
    }

    listen 80;
}
```

- **Enable the configuration:**

- ```
sudo ln -s /etc/nginx/sites-available/verify.rupp.edu.kh /etc/nginx/sites-enabled/
```

- **Test Nginx configuration:**

- ```
sudo nginx -t
```

- **Reload Nginx:**

- ```
sudo systemctl reload nginx
```