

Deployment Guide

Project Overview

- Frontend: React + TypeScript (static build served via nginx)
- Backend: Node.js + Express + Mongoose (port 5050)
- Database: MongoDB (local or cloud)
- Web Server: nginx (proxies /api to backend and serves frontend)
- Platform: Google Cloud VM (Debian)

Prerequisites

- VM: Debian 12, 2vCPU, 4GB RAM
- Firewall: Open ports 22, 80

Backend Deployment

1. SSH into server
2. `cd ~/Interview-Hub/server && npm install`
3. `npx tsc`
4. Run: `node dist/index.js` or `pm2 start dist/index.js --name backend`

Frontend Deployment

1. Create `.env.production` with `REACT_APP_API_URL=/api`
2. `cd client && npm install`
3. `npm run build`
4. `sudo rm -rf /var/www/html/* && sudo cp -r build/* /var/www/html/`

nginx Configuration

Edit /etc/nginx/sites-available/default:

```
location /api/ {  
    proxy_pass http://localhost:5050;  
    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;  
}
```

Test and reload: `sudo nginx -t && sudo systemctl reload nginx`

Verification

- Visit: `http://<server-ip>/`
- Login POST `/api/auth/login` must return 200/401

Optional Enhancements

- pm2 startup and pm2 save for auto start
- certbot for HTTPS

You're deployed. Congrats!