



SUMMARY

Backend-oriented Web Developer with hands-on experience in **ASP.NET Core**, **RESTful API** design, and database management.

Complementary knowledge of Frontend development (React/TypeScript) enables effective cross-functional collaboration and informs more system-aware backend decisions.

TECHNICAL SKILLS

- **Programming Languages:** C#, SQL, JavaScript, TypeScript.
- **Backend:** ASP.NET Core (Web API, RESTful API), Entity Framework Core.
- **Databases:** Microsoft SQL Server (MSSQL Server), PostgreSQL.
- **Frontend:** React.js, HTML, CSS, Tailwind.
- **DevOps:** Docker, CI/CD (with GitHub Actions), VPS management.
- **Software Development Methodologies:** Agile Scrum fundamentals.

WORK EXPERIENCE & PROJECT

Viet Y Clinic Management System - Freelance

Mar 2025 - Nov 2025

Team size: 4 members.

Role: Fullstack Developer.

Brief: Web-based management platform for a Vietnamese traditional clinic, supporting online medical examination registration, patient record management, examination workflows for doctors, and system administration for clinics.

Techstack:

- **BE:** ASP.NET Core Web API (.NET 8), MSSQL Server, Redis, SignalR, EF Core.
- **FE:** React 18, TypeScript, Vite.
- **Deploy:** Docker, GitHub Actions, VPS.
- **External Integrations:** Mail STMP, eSMS, PayOs, Google reCAPTCHA, Backblaze B2 (CloudStorage).

Contributions:

- Designed and implemented **RESTful APIs** following **Clean Architecture**, ensuring separation of concerns and maintainability.
- Designed relational schema with **MSSQL Server**, using **EF Core 8** for ORM-based data access and database migrations.
- Built real-time features using **SignalR** to support live status updates during medical examination workflows.
- Implemented medical examination workflows, including form submission, status transitions, and role-based processing.
- Developed core management modules:
 - User & role management
 - Patient records & medical examination forms.
 - Medicines, medicine groups & herbal ingredients.
 - System configuration (branches, departments, clinical questions, claims, page permissions, etc.)
- Implemented authentication & security: **JWT Bearer**, **OTP via Email/SMS** (using Redis-backend), **ASP.NET Core Identity**.
- Containerized the backend with **Docker** and configured **GitHub Actions CI/CD pipeline** for automated build and deployment to **VPS**.

CocoQR - Personal Project <https://cocoqr.cocome.online>

February 2026 - Now

Brief: Web application for creating, managing and customizing VietQR-standard QR codes, with real-time updates and secure account management.

Techstack:

- **BE:** ASP.NET Core Web API (.NET 8), MSSQL Server, Redis, EFCore, Dapper.
- **FE:** React 19, TypeScript, Vite.
- **Deploy:** Docker, DockerHub, GitHub Actions, VPS (DO droplet).
- **Storage:** Cloudinary/DigitalOcean Spaces.

Contributions:

- Designed and implemented **RESTful APIs** following **Clean Architecture** (Domain / Application / Infrastructure / Presentation layers), ensuring separation of concerns and maintainability.
- Built the **VietQR code generation engine**: implemented EMVCo-standard data encoding, CRC-16 checksum calculation, and dynamic/static QR mode logic per NAPAS specification.
- Implemented authentication system with **JWT Bearer** and **Google OAuth 2.0** sign-in, with role-based access control (RBAC) for admin dashboard functionality.
- Designed relational schema with **MSSQL Server**, leveraged **EF Core 8** for database migrations and seeding, and used **Dapper** for all data access via raw SQL queries.
- Integrated **Redis** as a read-through cache for frequently accessed, rarely changed reference data (bank list, provider configurations), reducing redundant database queries on high-read endpoints.
- Integrated **Cloudinary** and **DigitalOcean Spaces** for file/image storage with pre-signed URL handling.
- Containerized the backend service with **Docker**, published images to **DockerHub**, and configured **GitHub Actions CI/CD pipeline** for automated build and deployment to **VPS**.

Github:

BE: <https://github.com/ncthangg/cocoqr-be>

FE: <https://github.com/ncthangg/cocoqr-fe>

EDUCATION

FPT University - Ho Chi Minh City

Bachelor of Software Engineering