Hossam Reda Tohamy

Full Stack

PROFILE

Aspiring backend developer experienced in building scalable web applications using ASP.NET Core and EF Core. Passionate about clean architecture and problem-solving.

EDUCATION

internship in Upskilling 12

05/2025 - 08/2025

Elshorouk Academy, Computer Science

SKILLS

programming language: C, C#, HTML, CSS, JS, Assembly

concepts & skills: OOP, Data structure, Algorithm, Problem solving, RESTfull APIs

Framworks & Tecnologies: ASP. NET MVC, ASP. NET Web APIs, EF Core, LINQ

Tools: Git, Github, SQLServer, Visual Studio

PROJECTS

Hotel System 05/2025 – present

Developed a role-based hotel reservation backend using ASP.NET **Core Web API**, **Entity Framework Core**, and **JWT authentication**. The system supports two main roles:

- Hotel Staff: Manage rooms, offers, reservations, payments, and customer feedback.
- Customer: Search rooms, make and manage reservations, and submit feedback.

Key features include room availability tracking, dynamic offer assignment, invoice generation, booking reports, and a customer feedback system. Only authenticated users can make or modify reservations, while anonymous users can browse offers and available rooms.

Applied Clean Architecture with a clear separation of concerns across the Core, Infrastructure, and Application (Services) layers. Implemented RESTful APIs using Clean Architecture pattern for modularity and scalability.

Technologies: ASP.NET Core Web API, C#, Entity Framework Core, SQL Server, AutoMapper, JWT Authentication, RESTful APIs, LINQ, Postman, Git. GitHub Link:Hotel System 🗷

School Management System (Full-Stack Project)

Developed a full-stack school management system using .NET and Angular with vertical slicing architecture. The system optimizes teacher-class assignments and prevents scheduling conflicts. Key features include:

- Teachers can be assigned to multiple classes and subjects, with automatic conflict detection for overlapping time slots.
- Classes can have multiple teachers and subjects, with easy schedule management.
- Dedicated teacher and class pages display all assignments and subjects in a user-friendly interface.
- Implemented using CQRS pattern, MediatR, and Orchestrator for clear separation of concerns and maintainable code.
- Used **AutoMapper** for efficient mapping between DTOs and domain models.

Technologies: C# (.NET), Angular, ASP.NET ☑ Core, Entity Framework, SQL Server, REST APIs.

Key Achievements:

- Implemented conflict detection to prevent overlapping teacher assignments.
- Created dynamic, interactive pages for teachers and classes.
- Improved schedule management efficiency and reduced administrative errors.
- Git Hub Link .NET : School_NET □
- Git Hub Link Angular : School_Angular 🗆

Project: Developed a role-based quiz management backend using ASP.NET **Core Web API** with **JWT authentication** and **Entity Framework Core**. The system supports two main roles:

- Instructor: Manages courses, quizzes, questions (with difficulty levels), and assigns exams manually or automatically to students
- **Student:** Enrolls in courses, takes assigned quizzes or finals, and views results.

Supports exam types (Quiz/Final), question levels (Simple/Medium/Hard), and auto-balanced question assignment. Implemented RESTful APIs with Controller-Service-Repository to ensure scalability and maintainability.

Technologies: ASP.NET ☑ Core Web API, C#, Entity Framework Core, SQL Server, AutoMapper, JWT Authentication, RESTful APIs, LINQ, Postman, Git. **GitHub Link:Quiz Managment System** ☑

E-Commerce System 03/2025 - 04/2025

Project: E-Commerce Web API System Developed a role-based E-Commerce backend using ASP .NET **Web API** with **JWT authentication** and **Entity Framework**. The system supports three main roles:

- Admin: Manages users, categories, and system settings.
- Seller: Manages products, orders, and sales.
- **Buyer**: Browses products, places orders, and submits reviews. Implemented RESTful APIs with clean architecture for scalability and maintainability.

Technologies:ASP. **NET** Web API, C#, Entity Framework, SQL Server, JWT Authentication, RESTful APIs, LINQ, JSON, Postman, Git.

Github Link: Project E-Commerce System 🖸

Hosptail System 02/2025 – 03/2025

Hospital Management System (MVC)

A web-based system built using the MVC design pattern. It includes three main user roles:

- Admin: Manages doctor/patient accounts, schedules appointments, and oversees hospital resources.
- **Doctor**: Views appointments, adds diagnoses/prescriptions, and updates patient records.
- Patient: Registers, books appointments, and views medical history and notifications.
- Tecnology: C#, OOP, SQL, Linq, JWT, EF Core, ASP. NET MVC, HTML, CSS, Bootstrap, JS, Razor Views
- Github Link: Project Hosptial System 🖸