

Project: Product Inventory REST API

Objective

Build a simple **RESTful API** using **ASP.NET Core Web API** to manage products in an inventory.

Requirements

Core Features

- Add Product Name, Description, Price, StockQuantity, Category.
- Get All Products Optionally filter by Category and sort by Price.
- Get Product by ID Fetch a single product.
- **Update Product** Modify product details like price or stock.
- **Delete Product** Soft delete (mark as inactive).

Technical Guidelines

- Use ASP.NET Core Web API and Entity Framework Core.
- Use SQLite or SQL Server LocalDB for storage.
- Validate inputs and return proper HTTP status codes (200, 201, 400, 404).

Optional Bonus

- · Search by product name or description.
- Pagination for product list.
- Low-stock alert (e.g., stock < 5).

Deliverables

Project on GitHub/GitLab.

- **README.md** with setup steps.
- **Postman collection** or sample API endpoints.