README

Project Overview

This project involves managing a simple inventory system that includes two main entities: Products and Suppliers.

Each product is associated with a supplier, and relevant details such as stock levels, pricing, and reorder levels are tracked.

Data Structure

The system contains the following tables:

Products Table

Id - Unique identifier for each product (auto-generated).

Name - Name of the product.

QuantityPerUnit - Type of packaging (Lookup: Kilo, Box, Can, Liter, Bottle).

ReorderLevel - Minimum units to maintain in stock.

SupplierId - Reference to a supplier (foreign key).

UnitPrice - Price per unit of the product.

UnitsInStock - Number of units available in stock.

UnitsOnOrder - Number of units currently on order.

Suppliers Table

Id - Unique identifier for each supplier (auto-generated).

Name - Name of the supplier.

Requirements

- Implement a database schema that supports the above structure.

- Ensure data integrity with appropriate constraints (e.g., foreign keys, non-nullable fields).

- Develop CRUD operations for both Products and Suppliers.

- Implement lookup functionality for QuantityPerUnit and SupplierId.

Usage

1. Adding a Supplier: Create a new supplier with a unique name.

2. Adding a Product: Assign a supplier and specify product details.

3. Updating Stock: Modify UnitsInStock and UnitsOnOrder as needed.

4. Reorder Monitoring: Ensure UnitsInStock does not fall below ReorderLevel.

Future Enhancements

- Implement a user interface for easier data entry and management.

- Add reporting features for stock levels and supplier analysis.

- Introduce an API for external system integration.