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INVENTORY MANAGEMENT SYSTEM FOR RETAILERS

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PROBLEM STATEMENT

Develop a inventory management system for retailers to manage the following aspects:

- Product Details
- Product Stocks
- Vendor Details
- Purchase Invoices
- Optionally Customer data

ABSTRACT

This project is all about developing a comprehensive software solution that streamline and optimize the inventory management processes within retail businesses.

In the dynamic and competitive retail industry, effective inventory management is crucial for maintaining optimal stock levels, reducing operational costs, and providing excellent customer service.

This endeavor focuses on crafting a comprehensive application, seamlessly merging the capabilities of Windows Forms for the frontend and ASP.NET Core for the backend.

ABSTRACT

Retail proprietors gain the ability to swiftly access inventory statuses, monitor sales trends, dissect purchasing patterns, and arrive at well-informed determinations to refine stocking strategies.

The project aims to furnish retailers with an array of functionalities encompassing real-time inventory tracking, automated replenishment triggered by predefined thresholds, instantaneous updates and comprehensive reports to facilitate data-driven choices.

By centralizing and automating inventory management duties, retailers can anticipate elevated efficiency, mitigated instances of stockouts, curtailed surplus inventory scenarios, and an overall ameliorated profitability outlook.

TECHNICAL DETAILS

- IDE: JetBrains Rider, Visual Studio 2022
- Platform: .NET 7
- Frameworks: Windows Forms, ASP.NET Core API
- Database Provider: Microsoft SQL Server
- Deployment Platforms: Web and Windows

REFERENCES

- Inventory management for retail companies, “A literature review and current trends”, March 2021, DOI:10.1109/ICI2ST51859.2021.00018, Conference: 2021 Second International Conference on Information Systems and Software Technologies (ICI2ST)
- Y. Fan, 2010, "Development of inventory management system," 2nd IEEE International Conference on Information Management and Engineering, 2010, pp. 207-210, Doi: 10.1109/ICIME.2010.5478077.

REFERENCES

- Pro C# 11.0 with .NET and .NET Core
- Pro ASP.NET Core MVC 7
- ASP.NET Core Documentation:
<https://docs.microsoft.com/en-us/aspnet/>