

An Effective Inventory Management and Control System for Improving the Performance of the Manufacturing Enterprises

Dr. A. Sivakumar^{#1}, Otoo Kelvin Yaw^{*2}

*#Assistant Professor, Department of Computer Science,
Rathinam College of Arts and Science, Coimbatore, Tamil Nadu, India -641021
sivamgp@gmail.com*

ORCID iD: <https://orcid.org/0000-0003-3517-816X>

**Student, B.Sc Information Technology, Rathinam College of Arts and Science,
Coimbatore, Tamil Nadu, India -641021
kelvinotoo63@gmail.com*

Abstract - The main aim of this project is building a website which will help companies identify which and how much stock to order at what time. It tracks inventory from purchase to the sale of goods. The practice identifies and responds to trends to ensure there's always enough stock to fulfill customer orders and proper warning of a shortage. Once sold, inventory becomes revenue. Before it sells, inventory (although reported as an asset on the balance sheet) ties up cash. Therefore, too much stock costs money and reduces cash flow. One measurement of good inventory management is inventory turnover. An accounting Measurement, inventory turnover reflects how often stock is sold in a period. A business does not want more stock than sales. Poor inventory turnover can lead to deadstock, or unsold stock. It also helps the customers know the actual goods they want to buy. eg, they should be able to see goods in stock and goods out of stock and with manufactured companies.

Index Terms – Inventory System Management, Securities and Exchange Commission.

I. INTRODUCTION

Inventory management helps companies identify which and how much stock to order at what time. It tracks inventory from purchase to the sale of goods. The practice identifies and responds to trends to ensure there's always enough stock to fulfill customer orders and proper warning of a shortage. Once sold, inventory becomes revenue. Before it sells, inventory (although reported as an asset on the balance sheet) ties up cash. Therefore, too much stock costs money and reduces cash flow. One measurement of good inventory management is inventory turnover. An accounting measurement, inventory turnover reflects how often stock is

sold in a period. A business does not want more stock than sales. Poor inventory turnover can lead to deadstock, or unsold stock. Inventory management is vital to a company's health because it helps make sure there is rarely too much or too little stock on hand, limiting the risk of stock outs and inaccurate records. Public companies must track inventory as a requirement for compliance with Securities and Exchange Commission (SEC) rules and the Sarbanes-Oxley (SOX) Act. Companies must document their management processes to prove compliance.

II. SYSTEM STUDY

EXISTING SYSTEM:

There is no as such an existing system which stores and follows the products trends in manufacturing enterprise. Product trends in the sense that, the system is supposed to give the accurate number of product sold and products available in the manufacturing enterprise after the products are being bought freshly and entered into the system by the admin. And also the customers can get the chance of placing orders without delivery but can go to company for their goods of which they have to verify their details of the goods they ordered at home. The customer places order online with his or her details and the company is obligated to package the goods ordered or bought by the customer.

DRAWBACKS OF EXISTING SYSTE:

1. The problem with the present system is not same as problems encountered in any inventory system.
2. The existing system does not support automatic calculation of profit to be earned

3. The existing system is not suitable in some cases such as customer tracking his or her goods with their details.
4. Present system uses some algorithms for identifying goods in stock and not in stock.
5. Finally, the existing system does not always produce better results in tracking goods.

THE PROPOSED SYSTEM:

Website will be created for the management of the manufacturing enterprise. We have multiple sections like login for Admin and the customer. Both the Admin and the customer would need to access the inventory system with a good network.

III. SYSTEM DEVELOPMENT

Module Description:

The project consists of following modules: -

1. Admin
2. User

Admin:

- In admin module the admin can view the all the farmers, dealer details with their products and also customer details.
- When making one business for a product the 10 percentage of product cost given to admin.
- Admin can able to support and remove the users. By getting feedback frequently from users will implement the additional features to our site.
- Admin can view and store the feedbacks of customers at every time for implementing future advice.
- Admin is the government can share the information the related to crop, fertilizer and loan related information in this website.
- Loan sanction for the farmer is verified and acknowledge by the admin.

Admin:

The Admin should be able

To login

- To see the name of the product and pictures being updated and uploaded by him or her.
- See the products bought (amount of money used to purchase the product).
- See the products sold (amount of money earned after selling products).
- See the products available (amount of money left for product available).
- See the total amount of money the end of the day.

What the Admin should do to keep the site active

The admin should be able to

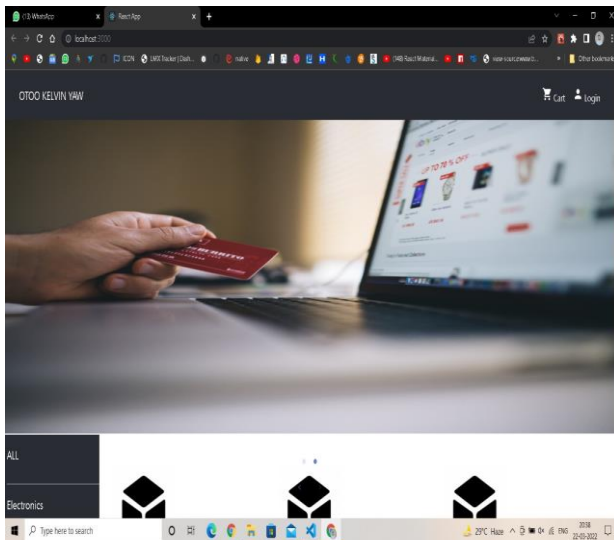
- Add products
- Update product bought , sold , available and important information about the product
- Delete products when not in stock
- Upload pictures of new products

User:

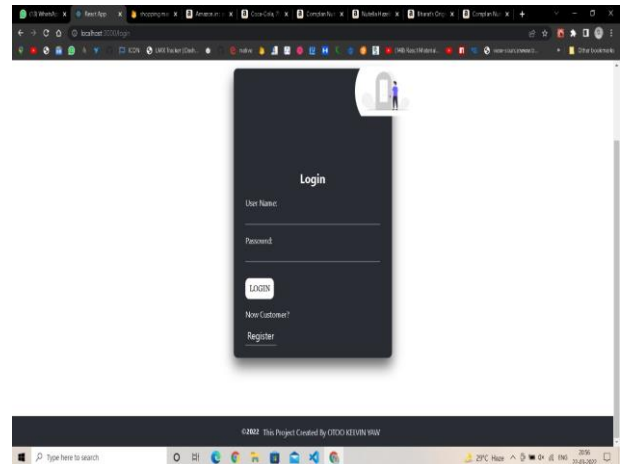
- A user is a true customer of this site.
- Once registration is completed. The user can login and can view all The products with their details which was published by admin.
- The user should be able to see the Picture of the product uploaded by the Admin.
- Number of product in stock.
- Price of the product.
- Name of the product's company.
- The customer should be able to place order with his/her personal details but would have to come for their product at the company

IV. OUTPUT SCREENS

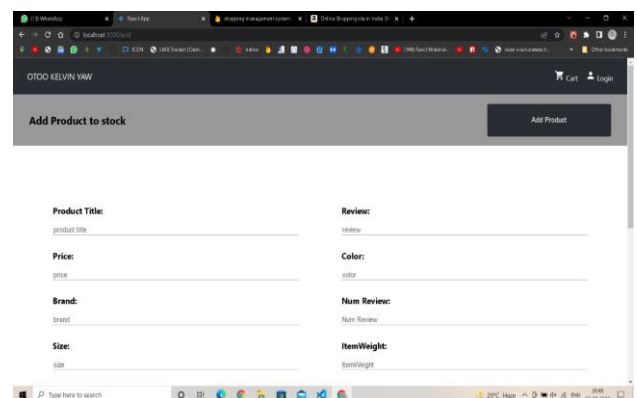
Home Page Form



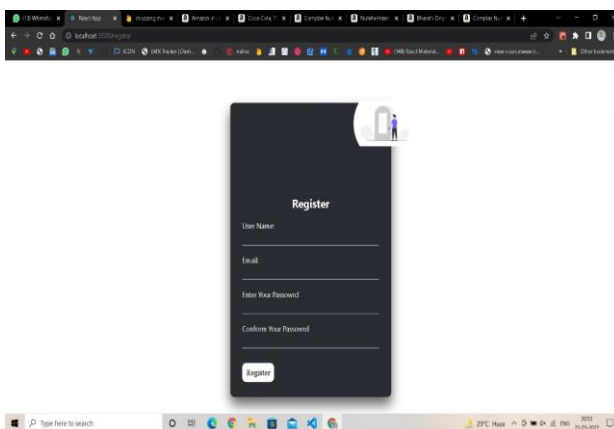
Login Form



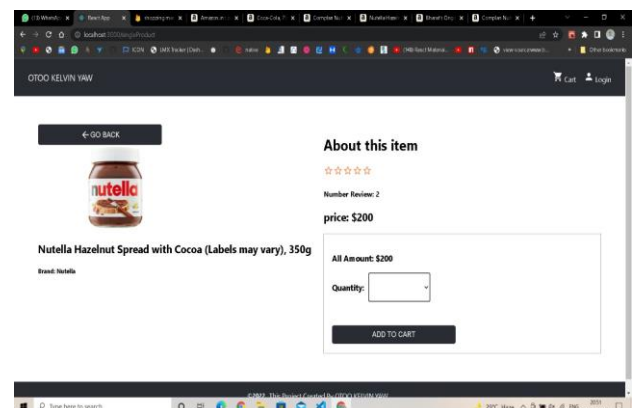
Add Product to Stock



New User Registration



About the Item



V. CONCLUSION

This Project is effectively made to help manufacturing enterprise to follow the trends of their goods in stock and out of stock, and also help them keep a good record of their money day in day out. And it will also help the customer to purchase goods without going extra mile in search or products in their geographical area.

VI. SCOPE FOR FUTURE ENHANCEMENTS

The world of computer is not static it is always subject to change. The technology today will become outdated very next day. To keep abstract of the technological improvements the system need refinements so it is concluded, it will be improved for further enhancements whenever the user needs an additional feature into it. Based on the pitfalls mentioned in the previous section, a list of suggestion are for further development:

- The code should be optimized to improve the efficiency.
- Security should be introduced to the system so that all images file are kept in secret location and general user and administrator have different levels of authority to access.
- The system will be working in all kinds of platforms.

REFERENCES

- [1] Rosalan, N. A. (2013). A Study on Inventory Control System Practice in Kuantan Food Processing Small Medium Enterprise. Degree Thesis, University Malaysia Pahang, Faculty of Technology.
- [2] Ngubane, N., Mayekiso, S., Sikota, S., Fitshane, S., Matsoso, M., & Bruwer, J.-P. (2015). Inventory Management Systems used by Manufacturing Small Medium and Micro Enterprises in Cape Town. Mediterranean Journal of Social Sciences, 6(1), 382-390.
- [3] Boyer, S. (2010). Research opportunities in supply chain management",. Journal of the Academy of Marketing Science, 38.
- [4] Raman, A., DeHoratius, N., & Ton, Z. (2001). Execution: The Missing Link in Retail Operations. California Management Review, 43(3), 136-152.

- [5] Swaleh, Anisa, L., Dr. WERE, & Susan. (2014). Factors Affecting Effective Implementation Of Inventory Management Systems In The Public Sector (A Case Study Of National Aids Control Council). International Journal of Social Sciences Management and Entrepreneurship, 1(2), 17-32.
- [6] Aro-Gordon, S. & Gupte, J. (2016). Contemporary Inventory Management Techniques: A Conceptual Investigation. Proceedings of the International Conference on Operations Management and Research, 21 – 22 January 2016, Mysuru, India.
- [7] Esther, U. U. (2012). Effectiveness of Inventory Management in a Manufacturing Company. Thesis, Caritas University, Amorji-Nike, Department of Accountancy.