International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 6 Volume No.6 October - November – 2022
DOI:10.46647/ijetms.2022.v06i06.050 ISSN: 2581-4621

A systematic overview of a inventory processing management developed system (app based)

[1]Aditi Kulkarni (USN 1DS21EC015), [1]P. Sai Laasya (USN 1DS21EC137),
[1]Pritha (USN 1DS21EC150), [1]Priya M.S. (USN 1DS21EC152)
[2]Adithya T.G., [3]Dr. Pavithra G., [4]Dr. Sindhu Sree M.,
[5]Dr. T.C.Manjunath* Ph.D. (IIT Bombay), Sr. Member IEEE, Fellow IE, Chartered Engineer
[1]First year BE UG (ECE) Second Sem Students, Dept. of Electronics & Communication Engg., Dayananda Sagar College of Engineering, Bangalore, Karnataka
[2]UG B.Tech. (CSE) Student of Third Semester, Dept. of Computer Science & Engg., PES University, Bangalore
[3]Associate Professor & mini-project guide, ECE Dept., DSCE, Bangalore, Karnataka
[4]Assistant Professor, ECE Dept., DSCE, Bangalore, Karnataka
[5]Professor & HOD, ECE Dept., DSCE, Bangalore, Karnataka

Abstract
In this paper, we present a brief review of the software based inventory management system & we develop a prototype of the work in the software section. A distributed programme called an inventory monitoring system was created to keep track of the details of the many records of stored grain. It keeps track of information such store inventory levels and needed goods, enabling the owner to monitor the development of the business. The database primarily comprises the shop's inventory at a specific point in time and assists the company in increasing earnings by providing useful recommendations. It guarantees that business operates smoothly, that goods are fairly priced, and that customers are happy. By offering groceries and other products online, people can buy with ease. It also guarantees freshness of the food. Non-perishable food is available there, packaged in cans, boxes, and bottles. Automatically keeps track of product amount and expiration dates, then sends a reminder to the store owner through website. Additionally, it gives its employees access to view the inventory. The work presented here is the mini-project work of the 2nd sem students of electronics & communication engineering department of dayananda sagar college of engg., bangalore.
Keywords—Management, Software, Inventory, App.

1. Introduction

A brief introduction about the related work that is being in this introductory note in the form of how to develop an inventory system for an app based module is presented in this section. We use the android version of the software to develop the app so that it is available in the playstore & any person can use it [1].
The networked program known as an inventory monitoring system was created to keep track of the specifics of the many records of the store's grain inventory. It keeps track of things like how much is kept at the shop and what items are needed there, and it also enables the owner to monitor the store's development. The database primarily comprises the shop's inventory at a specific point in time, and it also provides practical advice that helps the company increase sales. It guarantees smooth operations, competitive pricing, and happy consumers. Because groceries and other products are available online, customers can shop comfortably. Food freshness is also guaranteed [2].
It provides non-perishable food in cans, boxes, and bottles. automatically keeps track of a product's quantity and expiration date, then sends the store owner a reminder via the website. The ability to view the inventory is also granted to its employees. In order to reorder a product that has expired or been consumed, the shopkeeper receives the seller's information. In companies that handle transactions involving consumer goods, an inventory management system is crucial to guarantee quality control. Large retail stores may run out of supply on crucial items if inventory is not properly

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 6 Volume No.6 October - November – 2022
DOI:10.46647/ijetms.2022.v06i06.050 ISSN: 2581-4621

managed. When it is time to place a new order, a reliable inventory management system will notify the retailer [3].

2. Design of the Inventory System

Automatically following large shipments is another crucial use of inventory management systems. As an illustration, if a company orders ten pairs of socks for retail resale and only receives nine pairs, this will be clear upon inspection of the package's contents, and error is not expected. Alternatively, suppose a wholesaler orders 100,000 pairs of socks and discovers that 10,000 of them are missing. The odds of inaccuracy are high while manually counting each pair of socks. Reduced error risk is provided by an automated inventory management system [4] [5] [6] [7].

3. Backend of the inventory system

Only when a sufficient amount of inventory is kept on hand can a business efficiently manage its operating activities. All operational processes, including production, warehousing, sales, etc., are impacted by inventory. Opening and Closing inventories should both be large enough to prevent any negative effects on other business operations. As a result, inventory is crucial to operations management [8] [9].

4. Adoption of the proposed methodology

Fig. 1 gives the entity relationship diagram of proposed methodology used in the mini project work [10]. Information about item interactions is presented in Figs. 1 and 2 in chronological order. It shows the classes and objects involved in the scenario as well as the flow of messages that must be exchanged in order for the objects to carry out the scenario's functionality, which includes both admin and user login. Figure 3 provides details about an entity, which in this case is an object or a piece of data. A group of related entities is known as an entity set [11]. Figs. 2 & 3 gives the block diagram of proposed methodology that is adopted in the work.

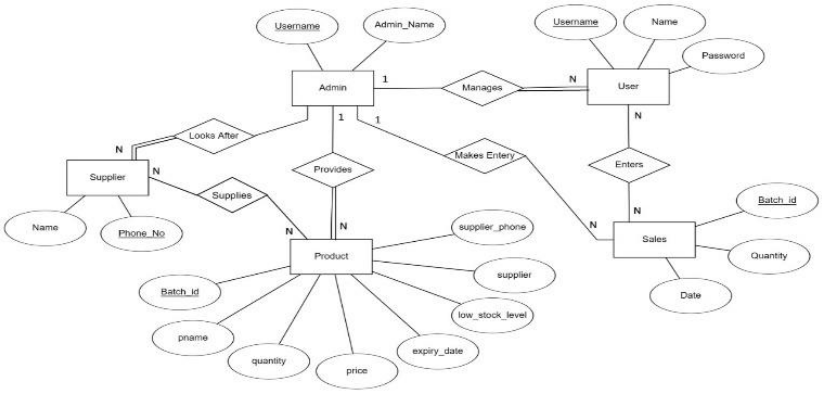

Fig. 1 : Entity relationship diagram of proposed methodology

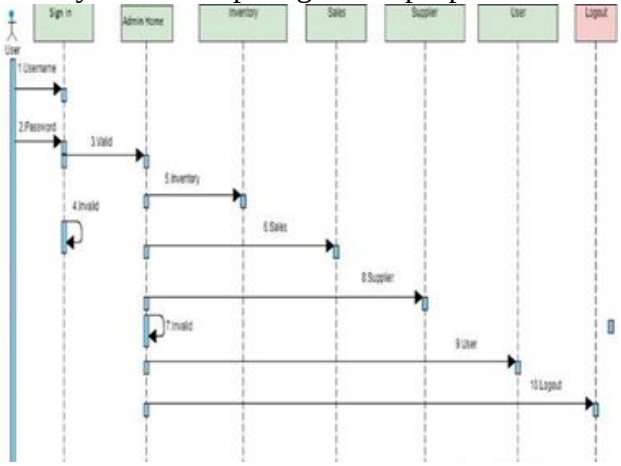

Fig. 2 : Block diagram of proposed methodology - I

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 6 Volume No.6 October - November – 2022
DOI:10.46647/ijetms.2022.v06i06.050 ISSN: 2581-4621

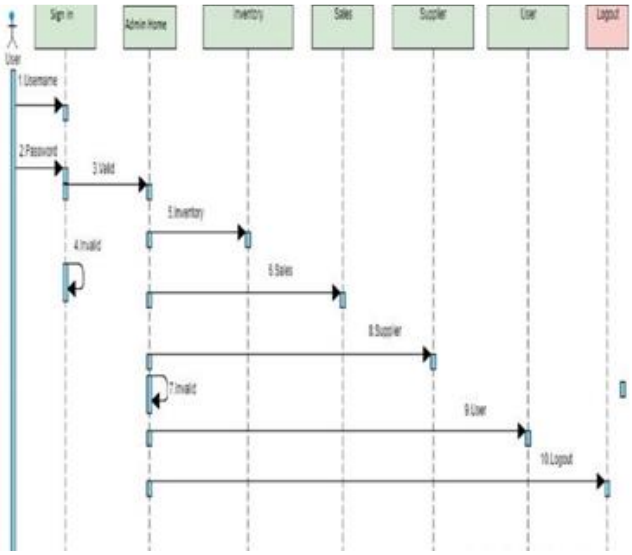

Fig. 3 : Block diagram of proposed methodology - II

5. Software specifications

Software specifications are Interactive graphics The front end of NetBeans IDE 8.2 is Java. Windows 7 or 8 or 10 is the operating system, with Java Server Pages serving as the server slide scripting, a MySQL server serving as the backend, and Java Script serving as the client slide scripting. The functional requirements include searching for information about a specific thing, adding new records, deleting existing records, displaying data, and updating records. Security of the system, ease of tracking and updating records, maintenance, minimal cost, and time needed to construct this project are non-functional requirements [12].

6. Conclusion & final comments of the survey

In this section, the final conclusive remarks of the work that is presented is being presented. Future potential for the project is enormous. The project may one day be executed on an intranet. The project is quite expandable, so it can be upgraded in the near future as and when the need for it arises. The customer is now able to manage and, as a result, conduct the complete project in a lot better, accurate, and error-free manner thanks to the proposed software of database Space Manager being available and fully working. The section that describes future adjustments that can be made to meet challenging is further enhancement.

References

[1]. Ali S S, Madaan ,Chan F Helel ―iGrocer -A Ubiquitous and Pervasive Smart Grocery Shopping System University of Florida, Gainesville, FL32611, USA
[2]. Hatefi S, Torabi, Bagheri P. (2015). “Multi criteria ABC inventory classification with mixed quantitative and qualitative criteria”. Available at:
[3]. http://premium.hoovers.com.proxy1.cl.msu.edu:2047/subscribe/ind/fr/profile/basic. xhtml?ID = 84 (accessed May 20).
[4]. Anderson, C. E.Burns, D. J. and Reid, J.S. (2003).“The Next Evolutionary Step for Regional Shopping Malls: A Measure of Acceptance of New Retail Concepts as Identified by Different Age Groups of Shoppers”, Journal of Shopping Center Research, Vol 10(2).
[5]. Sherman. E , Mathur, A. and Smith, R. (1997). “Store Environment and Consumer Purchase Behavior: Mediating Role of Consumer Emotions,” Psychology and Marketing, Vol 14 (4), pp 361–178.
[6]. Reardon,T and Ashok Gulati(2008). “The rise of supermarkets and their development implications-International experience relevant for India”, IFPRI. Discussion Paper00752, International Food Policy Research Institute, Washington, D.C.

DOI:10.46647/ijetms.2022.v06i06.050 ISSN: 2581-4621

[7]. Tam, Donna. "Peapod who? Online grocer shows Amazon, Walmart how it's done". CNET. Retrieved28 April2014.
[8]. Baltas, G. and Papastathopoulou, P. (2003), "Shopper characteristics, product and store choice criteria: a survey in the Greek grocery sector", International Journal of
[9]. Retail & Distribution Management, Vol. 31 No. 10, pp. 498-507.
[10]. Gagliano, K.B. and Hathcote, J. (1994), "Customer expectations and perceptions of service quality in retail apparel specialty stores", The Journal of Services Marketing, Vol. 8 No. 1, pp. 60-70.
[11]. Pavithra G., Dr. T.C. Manjunath, "Normalization concept development in IP", Indian Journal of Science & Technology (IJST)-UGC Recognized, Print ISSN : 0974-6846, ISSN Online ISSN : 0974-5645, IC Value : 5.02, Thomson Reuters, Vol. 10, Issue 35, Sept. 2017.
[12]. Dr. Pavithra G., Mahesh B. Neelagar, Dr. T.C.Manjunath, "Development of a robotic part fixture mechanism for a conveyer belt problem for doing PNP operation in an industrial scenario using a fixed robot", 5th IEEE International Conference on Communication and Electronics Systems (ICCES 2020), PPG Institute of Technology, Coimbatore, TN, 10-12, June 2020.