

Tribhuvan University

Faculty of Humanities and Social Sciences

A PROJECT REPORT ON STOCK MANAGEMENT SYSTEM

Submitted to

Department of Computer Application

Bajra International College

In partial fulfilment of the requirements for the Bachelors in Computer Application

Submitted by

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SUPERVISOR'S RECOMENDATION

I hereby recommend that this project prepared under my supervision by MILAN KARKI entitled "STOCK MANAGEMENT SYSTEM" in partial fulfilment of the requirements for the degree of Bachelor of Computer Application is recommended for the final evaluation.

Signature of the Supervisor

Kumar Lamichhane

Lecturer, BCA

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Tribhuvan University Faculty of Humanities and Social Sciences Bajra International college

LETTER OF APPROVAL

This is to certify that this project prepared by MILAN KARKI entitled "STOCK MANAGEMENT SYSTEM" in partial fulfilment of the requirements for the degree of Bachelor in Computer Application has been evaluated. In our opinion it is satisfactory in the scope and quality as a project for the required degree.

Mr. Kumar Lamichhane	Mr. Anzal Sharma
Supervisor	Chief Academic Officer
BAJRA INT College	BAJRA INT College
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External Examiner	Internal Examiner
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ACKNOWLEDGEMENT

This project has been prepared for the partial fulfillment of the requirement for BCA Sixth

Semester PROJECT II course designed by TU.

Knowledge is not just limited on our books and our words; it varies on our experience, on the

way facing the time and situation that passes across us. The project work on STOCK

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attitudes in an IT sector.

The project is a successful work, and this project is a perfect symbolization of knowledge,

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indirectly while preparing this project.

In this project Supervised by Supervisor Mr. Kumar Lamichhane of Bajra International College

I have investigated and applied the use of STOCK MANAGEMENT SYSTEM. The main aim

of making this project is to know about MORE THAN CRUD OPERATION and its function.

By doing this project I was able to understand about different uses and application of software

and present it as example through my project.

Really, this project is an excellent example of co-ordinate and united team as well as other

helpful faces and hands.

Thank You!!!

Name: Milan Karki

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ABSTRACT

Many organizations still rely on manual systems, where workers record information by hand.

However, this approach can lead to issues such as workers forgetting to update stock levels,

resulting in delays when ordering necessary items. Additionally, the reliance on physical ledger

books for inventory management poses challenges as they need to be carried by staff at all

times. If the ledger is not available, stock updates cannot be made. The proposed system aims

to address these problems and improve the current system.

In today's era of globalization, people heavily rely on Electronic devices. Therefore, developing

a Web application can leverage the widespread use of these devices and significantly streamline

staff tasks. The proposed system will facilitate the creation of purchase orders, sales orders,

return orders, and invoices. Moreover, the person in charge will have real-time visibility into

stock movement as updates will be made directly to the database. The successful

implementation of this product has the potential to revolutionize the future of stock

management systems.

By addressing these issues and utilizing technology, the proposed system offers enhanced

efficiency, improved accuracy, and seamless stock management processes.

Keywords: Stock Management System; Purchase Order; Sales Order; Return List; Remaining

Stock; Invoice; Login.

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Bajra International College

Ref No:			
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Subject: Approval of Project Proposal			
The project entitled "STOCK MANAGEMENT SYSTEM" proposed by Mr. Milan Karki for the partial fulfilment of the requirement for Bachelor in Computer Application (BCA), Sixth semester has been approved for further development.			
Proposal Evaluation Committee			
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LIST OF ABBREVIATION

SMS: Stock Management System

PO: Purchase Order

BO: Back Order

ER: Entity Relation

DFD: Data Flow Diagram

HTML: Hyper Text Markup Language

CSS: Cascading Style Sheet

PHP: Hypertext Preprocessor

MySQL: My Structured Query Language

1 Introduction

Stock Management is the practice of ordering, storing, tracking, and controlling inventory Stock Management applies to every item a business uses to produce its products or services from raw materials to finished goods. In other words, stock management covers every aspect of a business's inventory. Stock Management System helps in the efficient monitoring of constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or to low so that the operation of the company into difficulties [3].

Stock Management System is very important organizations especially where there are a lot of orders are being placed every day and there are lot of materials and the maintenance is really important which the system will do and also will record the time taken to process an order and this system is really important as it can help the organizations to be alerted when the level of inventory is very low and focuses on the three aspects of inventory management and prevent from failures in the future.

Stock Management System also demands a solid understanding of how long it will take for those materials to transfer out of the inventory to be established. By Knowing these two important lead key aspects makes it possible to know when to place an order and how many units must be ordered to keep production running smoothly.

The two common inventory-management strategies are the just-in-time method, where the companies plan to receive items as they are needed rather than maintaining high inventory levels, and materials requirement planning strategy, which schedules material deliveries based on sales forecasts [4].

Nowadays, many companies use the system to avoid overstock, miscount and outages. It is a system for organizing a better inventory data than that was used before which is generally stored in manual form books or in spreadsheets. This application has admin component to manage the inventory and maintenance of the inventory system. This System has general organization profile, stock details, purchase details and the remaining stock that are presented in the organization. This System also provides the remaining balance of the stock as well as the details of the balance of transaction. Each new stock is created and entitled with the named and the entry date of that stock and it can also be update any time when required as per the transaction or the sales is returned in case. Here the login page is created to protect the

management of the stock of organization in order to prevent it from the threads and misuse of the inventory. This management system can be used by staffs that can enables the user to view the product and item information that have been key-in. Staff or user can update any other information directly by using online system just like any other online systems [3].

The added valued contain in this system is Product Calculation Method (PCM) which it can be used by staffs to key-in any item that company bought or item in store to make sure the actual amount of that item or product. This method will make the calculation before the item stored and give a recommending about the place that item should be stored. This method can help staffs to move the item easily when they know the actual places to keep the item [6].

Now a day's people lives in a modern era. They made everything according to their needs. They tried all the possible way to make their life easy and comfortable. Stock house or warehouse is a very common term right now. People stores their needed thing for different purpose. It is a very toughest thing to manage stock in proper way. After that people manage their stock in analogue way. Their stock management was paper or oral based.

After fully development of this system, system should be able to setup category, product under category, supplier and customer. It should be able to purchase product and sale product and required functionalities under purchase and sale module. After development admin can get stock current status, report on sale and purchase. There is only one admin in this system. Only admin can create user. All the types of functional and non-functional requirements will be implemented for this system. The system has total various modules. Here first of all admin need to setup category and setup product under category. Then he need to setup supplier and customer from where the organization buy products and to whom they sell their product. When admin setup products he can set reorder level against individual product. There also purchase and sale module. Admin can store all the information about purchase. Such as which kind of products they bought, total products, product MRP etc. Admin can also store sale information. He can check stock, Number of sold product, number of stored product etc. there also report module in this system where admin can check report of purchase and sale. He can also get statistics about total sales.

2 Problem Statement

The main problem that occurs in several companies or retailers is the lack of an efficient system to calculate and manage their stock levels. Through my analysis, I have discovered that some companies still rely on paper-based or manual filing systems to store information about their stocks. This manual approach requires a significant amount of time and effort from administrators or managers to trace product status and details. Additionally, it can result in inventory inaccuracies if workers forget to update the inventory manually or make mistakes during the manual counting process.

The Stock Management System will effectively address these issues by storing all inventory related information in a database. This will make it much easier to manage and update stock data, saving time and reducing costs for the organization. The system will automate various inventory-related tasks and provide a centralized platform for tracking purchases, sales, returns, and available stock levels. Furthermore, it will calculate costs, including taxes and discounts, accurately and efficiently.

Stock Management System will provide all the information needed and required for inventory related in understanding in easy way and that will reduce the time taken for the inventory manager to record all the products that are in inventory which takes too much time. This will help to list out all the details using the system or search all the inventory information.

3 Objective

- 1. To design and develop a user-friendly system that effectively handles and manages information about items or products, while also providing calculations for the information system.
- 2. To develop a system that deals with the day-to-day needs of organization like managing purchase, sales, return, and available stocks.
- 3. Keep each and every calculation and help to generate reports of transactions in Excel, PDF format.
- 4. Additionally, the system should provide a seamless printing feature for generating reports of various transactions, including purchase, sales, and returns.

4. Methodology

A system development methodology in software engineering is the main guidance for constructing, planning and also controlling the process of developing an information system. Common methodologies used were waterfall model, prototyping, spiral development, extreme programming and also some other various types of methodologies.

Considering the fact that this project involves design and implementation of a software system regardless that is web-based, it will be important to mention and consider some models used in software development and deployment, some general models of software development are namely waterfall model, prototyping, spiral development, extreme programming and also some other various types of methodologies.

The waterfall model fits the development of this website. The main aim of using this approach is we can focus on each part of the model during development and come back to it if need be. The project can easily de broken down into different parts based on this model. This is the model that will be used to develop the Stock Management System. However, feedback loops will be allowed during the whole software development process. The model chosen for this project has to favours two developers for a project. Because we are the only ones who are going to implement this project. We find this model suitable for us to follow.

It requires that software development follows the following stages:

- Requirements are to be proposed.
- System design should be made according to the requirements.
- Implementation of the features according to the design.
- Integration and testing of the system.
- Deployment of the system.
- Maintenance of the system.

Waterfall methodology is used while building this website. This project has specific documentation, fixed time, fixed requirements, and well-understanding technology so in order to build this system waterfall methodology can be properly utilized.

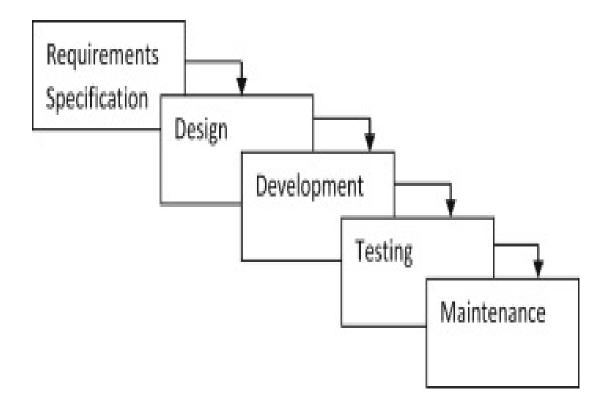


Fig 4: Waterfall model

- Requirements Analysis: In the first phase of the waterfall model, the requirements for the stock management system are gathered from stakeholders such as business owners, managers, and users. This involves defining the features, functionalities, and scope of the system.
- 2. Design: In the second phase, the requirements gathered in the first phase are used to design the system. This includes creating a detailed system design document that outlines the system architecture, database schema, user interface design, and system workflows.
- 3. Deployment: In the fifth phase, the stock management system is deployed to the production environment. This involves installing the system on the production servers, configuring the system for the production environment, and performing any necessary data migration..
- 4. Testing: In the fourth phase, the stock management system is thoroughly tested to ensure that it meets the requirements outlined in the first phase. This includes unit testing, integration testing, system testing, and user acceptance testing.
- 5. Maintenance: In the final phase, the stock management system is maintained and updated as necessary to ensure that it continues to meet the needs of the business. This includes bug fixes, system updates, and new feature development.

a. Requirement Identification

Requirement identification is the process of determining and defining the needs and expectations of a stock management system. It involves gathering and analysing information about the system's purpose, scope, features, and constraints to develop a clear and comprehensive set of requirements that will guide the system's design and development. The requirements identification process is crucial to ensure that the stock management system meets the needs of its users and delivers the expected benefits. It helps to define the system's purpose, scope, features, constraints, and user requirements, and guides the development process towards a successful outcome.

- 1. User Interface: The system should have a user-friendly interface that allows users to easily navigate through the system and perform various actions such as adding or editing stock items, generating reports, and managing inventory levels.
- 2. Dashboard: The system should have a dashboard that provides a quick overview of stock levels, sales trends, and other important metrics.
- 3. Stock Tracking: The system should be able to track stock levels for each item, including current stock levels, incoming stock, and outgoing stock..
- 4. Purchase Order Management: The system should allow users to create and manage purchase orders for stock items, including tracking the status of each order.
- 5. Sales Order Management: The system should allow users to create and manage sales orders for stock items, including tracking the status of each order.
- 6. Reporting: The system should provide a range of reports, including stock levels, sales trends, and inventory turnover, to help users make informed decisions.
- 7. Integration: The system should be able to integrate with other systems such as accounting software and e-commerce platforms, to streamline business processes.
- 8. Security: The system should have robust security measures in place to protect sensitive data such as stock levels, purchase orders, and sales orders. This may include user authentication, data encryption, and role-based access control.
- 9. Scalability: The system should be scalable to meet the needs of growing businesses, with the ability to handle larger volumes of stock

i. Study of existing System

A study of an existing system for stock management involves analyzing the current system that a business is using to manage its inventory. The purpose of this study is to identify any weaknesses in the current system and suggest improvements that can be made to enhance the efficiency and accuracy of stock management. The study may involve analyzing various aspects of the current system, such as the user interface, the stock tracking mechanism, the purchase order and sales order management, and the reporting capabilities.

During the study, it is essential to gather feedback from the users of the current system to identify any pain points they are experiencing. This can be achieved through surveys, interviews, and observations of the users in action. The feedback gathered can provide valuable insights into the current system's strengths and weaknesses and can be used to inform the development of a new system or the improvement of the existing one.

The study may also involve analyzing the data generated by the current system to identify patterns and trends in stock levels, sales, and inventory turnover. This data can be used to optimize the stock management process by identifying areas where improvements can be made, such as reducing excess stock or improving order fulfillment times.

Ultimately, the goal of studying an existing system for stock management is to identify opportunities for improvement that can help the business run more efficiently and effectively. By gathering feedback from users, analyzing data, and identifying pain points, businesses can develop a better understanding of their stock management needs and create a new system or improve the existing one that meets those needs.

After conducting research on existing stock management systems, we have identified a system called TradeGecko that provides a comprehensive solution for managing inventory, sales, and purchasing. TradeGecko offers a cloud-based platform that allows users to manage their stock levels in real-time, track orders and shipments, and generate reports on inventory performance.

The TradeGecko system includes features such as inventory tracking, order management, purchase orders, sales orders, and reporting. It also integrates with popular e-commerce platforms, accounting software, and shipping providers, making it a versatile solution for businesses of all sizes [5].

One of the key benefits of TradeGecko is its user-friendly interface, which makes it easy for users to navigate the system and perform various actions such as adding or editing stock items, generating reports, and managing inventory levels which allows users to easily add and update stock items, making stocktaking and stock tracking more accurate and efficient [5].

TradeGecko also offers a range of reporting features, including stock levels, sales trends, and inventory turnover, which provide valuable insights into business performance. The system is scalable and can handle large volumes of stock items, purchase orders, and sales orders, making it suitable for businesses that are growing rapidly [5].

SAP ERP Inventory Management: SAP ERP is a comprehensive enterprise resource planning system that includes inventory management functionality. This system allows businesses to track inventory levels, monitor product movement, and optimize replenishment processes. SAP ERP also includes features for managing warehouse operations, such as picking, packing, and shipping [6].

QuickBooks Online Inventory Management: QuickBooks Online is a cloud-based accounting and inventory management system designed for small and medium-sized businesses. This system allows businesses to track inventory levels, create purchase orders, and manage sales orders. QuickBooks Online also includes features for managing customers, vendors, and financial transactions [6].

Zoho Inventory: Zoho Inventory is a cloud-based inventory management system that allows businesses to track inventory levels across multiple channels, including e-commerce platforms and third-party marketplaces. This system also includes features for managing purchase orders, sales orders, and shipping operations. Zoho Inventory integrates with other Zoho applications, such as Zoho CRM and Zoho Books [4].

Fishbowl Inventory: Fishbowl Inventory is an inventory management system designed for small and mid-sized businesses. This system includes features for managing inventory levels, tracking product movement, and generating reports. Fishbowl Inventory also includes features for managing manufacturing operations, such as bill of materials and work orders.

ii. Literature Review

Literature review is the formal methods that can be used to review the critical points of current knowledge including findings as well as theoretical and methodological particular topic for supporting issues. Products are considered as the business resources for the organization. This includes managing the product with appropriate way to review any time as per the requirement. Therefore it is important to have a computer based which has the ability to generate reports, maintain the balance of the stock, details about the purchase and sales in the organization. Before developing this application we came up with several Inventory Management System existing in the market, which helps to give the knowledge for the development of this project. These application software are only used by the large organization but so we came up with the application which can be used by the small company for the management of their stock in the production houses. After analysing the other inventory management system we decided to include some of common and key features that should be included in every inventory management system. So we decided to include those things that help the small organization to adapt with this application [3].

Stock management systems have become increasingly important in the modern business landscape, especially with the rise of e-commerce and online retail. Such systems help businesses keep track of their inventory levels, monitor product movement, and ensure that they always have enough stock on hand to meet customer demand. In this literature review, we will examine some of the key research studies and articles that have been published on stock management systems [7].

One study that explored the importance of stock management systems was conducted by Saravanan. The study examined the impact of a stock management system on the operational efficiency of a retail store. The results of the study showed that the use of a stock management system significantly improved the store's inventory accuracy, reduced stockouts, and increased the store's overall profitability [9].

Another study by Wang et explored the use of a real-time stock management system in the manufacturing industry. The study found that the system helped reduce excess inventory levels, improve product quality, and increase production efficiency.

In a similar study, Parvez and Kabir examined the impact of a stock management system on supply chain performance. The results of the study showed that the use of a stock management

system helped reduce inventory holding costs, minimize stockouts, and improve order fulfillment rates.

A more recent study by Jeevitha et al explored the use of a stock management system in the healthcare industry. The study found that the system helped reduce waste and spoilage, improve inventory accuracy, and increase the efficiency of medical supply management [5].

In addition to these research studies, there are many articles and reports available that provide insights into the best practices for stock management systems. For example, the Harvard Business Review published an article by Lee and Billington (2015) that provided a framework for improving supply chain management, including stock management. The article emphasized the importance of data analytics, collaboration between suppliers and customers, and the use of technology to improve inventory visibility.

Overall, the literature suggests that stock management systems can provide significant benefits to businesses across a wide range of industries. By improving inventory accuracy, reducing stockouts, and increasing operational efficiency, these systems can help businesses meet customer demand while minimizing costs and maximizing profitability

In addition to the studies and articles mentioned above, there are also some key trends and developments in the field of stock management systems that are worth considering.

One trend is the increasing use of artificial intelligence (AI) and machine learning (ML) in stock management systems. AI and ML can be used to analyze large amounts of data and identify patterns and trends that can help businesses make more informed decisions about inventory management. For example, AI and ML can be used to predict demand for certain products based on historical sales data, seasonal trends, and other factors. This can help businesses optimize their inventory levels and reduce waste and excess inventory.

Another trend is the move towards cloud-based stock management systems. Cloud-based systems offer several benefits over traditional on-premise systems, including lower upfront costs, greater scalability, and easier access to real-time data. With a cloud-based system, businesses can access their inventory data from anywhere and at any time, which can be particularly useful for companies with multiple locations or remote workers. There is also a growing interest in sustainable stock management systems that prioritize environmental and social responsibility. This includes reducing waste and excess inventory, using

environmentally-friendly packaging materials, and sourcing products from ethical and sustainable suppliers.

There is a recognition that stock management systems must be integrated with other systems and processes within a business in order to be truly effective. This includes integrating with accounting systems, order management systems, and logistics systems, among others. By integrating these systems, businesses can achieve greater visibility and control over their entire supply chain, from raw materials to finished products.

In addition to the trends and developments in stock management systems, there are also some challenges that businesses may face when implementing these systems. One challenge is the need to balance inventory levels with customer demand. Businesses need to ensure that they have enough inventory on hand to meet customer demand, while also avoiding excess inventory that can lead to waste and higher holding costs.

Another challenge is the complexity of managing inventory across multiple channels, such as brick-and-mortar stores, e-commerce platforms, and third-party marketplaces. Businesses need to ensure that their inventory levels are consistent across all channels, while also taking into account differences in customer demand and fulfillment capabilities.

To overcome these challenges, businesses can implement best practices such as demand forecasting, safety stock planning, and continuous inventory tracking. They can also invest in inventory management software that offers real-time tracking and analytics capabilities. By taking a strategic approach to inventory management and leveraging the latest technologies and best practices, businesses can optimize their inventory levels and maximize their overall operational efficiency and profitability [9].

In summary, the field of stock management systems is constantly evolving, with new technologies, trends, and best practices emerging all the time. By staying up-to-date on these developments and implementing the most effective strategies and systems, businesses can optimize their inventory management and improve their overall operational efficiency and profitability [7].

iii. Requirement Analysis

Requirement analysis is done so that the project gets the necessary features and will be easy for analysing system. Requirement analysis is an important phase in developing a stock management system, as it helps to ensure that the system meets the needs and expectations of the business It is a key instrument used to determine the needs and expectations of a new product. In this project requirements are categorized into two parts i.e. functional requirements and non-functional requirements.

For any system, there are functional and non-functional requirements to be considered while determining the requirements of the System.

Functional requirement: In this project the functional requirements are categorized into two different models i.e., Staff Module and Admin Module. Under Staff Model user can easily use the features like login, viewing products managing products, receiving products. Whereas Admin Module consists of using the system as an administrative which consists of features like managing products, managing users, managing suppler and viewing orders and printing orders and exporting data into excel or PDF. The Functional requirements in the project are mentioned below.

User Module:

- User shall login the system.
- User shall Manage Purchase, Sales, and Return Orders.
- User shall printing Purchase, Sales, Return Orders and Exporting data into excel or PDF.
- User shall View Back Order.
- User shall view available Stocks.

Admin Module:

- Admin shall login the system.
- Admin shall Manage Purchase, Sales, and Return Orders.
- Admin shall see the registered users and create the user.
- Admin shall delete the user.
- Admin shall view available Stocks.

- Admin shall printing Purchase, Sales, Return Orders and Exporting data into excel or PDF
- Admin shall printing Purchase, Sales, Return Orders and Exporting data into excel or PDF.
- Admin shall manage supplier.
- Admin shall manage Item list.

Non-functional requirements: They are an important aspect of developing a stock management system as they focus on the systems overall performance and usability. Here are some key non-functional requirements that should be considered during the development of a stock management system

- Performance: The system should be designed to handle large amounts of data and transactions with minimal response time. It should be able to process multiple user requests simultaneously without affecting system performance.
- Reliability: The system should be reliable and available at all times. It should be able
 to recover from any failures or crashes without losing data or disrupting business
 operations.
- Security: The system should be secure and protect sensitive inventory and customer
 data. It should be designed to prevent unauthorized access, data breaches, and other
 security threats.
- Usability: The system should be user-friendly and easy to use, with a well-designed user interface and clear navigation. It should be able to support multiple languages and be accessible to users with disabilities.
- Scalability: The system should be able to scale to handle increased data volumes, users, and transactions as the business grows. It should be designed to handle future expansion without significant system redesign.
- Maintainability: The system should be easy to maintain and update, with minimal downtime and disruptions to business operations. It should be designed with modular architecture and well-documented code to facilitate future updates and enhancements.

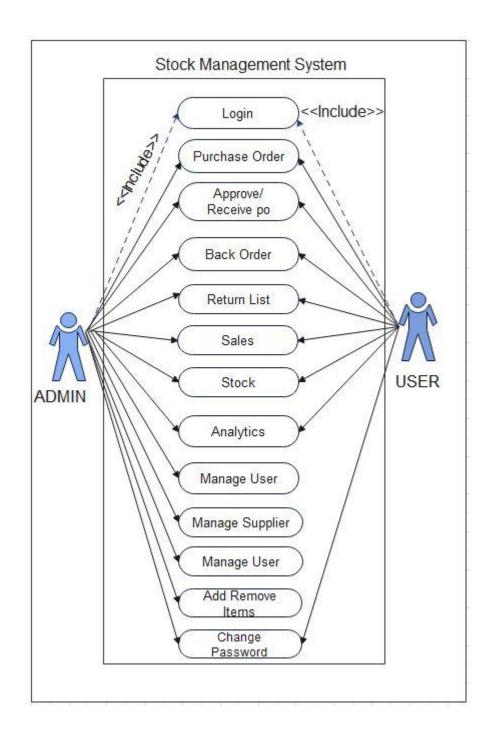


Fig 4: Use Case Diagram for Stock Management System

- **b. Feasibility study**: A feasibility study is an evaluation and analysis of a project or system that somebody has proposed. Following feasibilities were studied before building the system to see if the system could be built with exact requirements in required time.
- **i. Technical feasibility:** In order to design this system, it uses existing technologies, software and hardware so there is no technological hurdle to build this system.
 - The UI of our project is very simple
 - User will require internet browser and internet to use it
 - It will run on many existing web browsers with the latest versions and even in the smart phones.

Tools and Technology Used:

The Following software is used for the development of the System.

- VS Code
- MySQL
- Apache [Xampp]
- Minimum Windows 8 required.
- **ii. Operational feasibility:** These include the reliability, maintainability, usability, supportability. The proposed system is operationally feasible as it is reliable for all type of user i.e., whether or not the user has the knowledge of computer or not. The proposed system is supported for a small to large-scale organization. It is simple and easy to use due to simple user interface and its operational feasible.
- **iii. Economic feasibility:** Before the development of a system, the proposed system should be studied whether or not it is within the budget estimated by the organization. The project that we are developing is within the cost estimation of the organization. The project cost is less and no more burdens are needed. The system development does not have any requirement of expensive hardware and software. The platform are open sources and the resources required for the project are also open source. Hence the project is said to be economically feasibility

5. Gantt Chart

The system that we developed is scheduling feasible as it does not require more time for the development phase. The data collection takes more time to collect the data about various products and their quality. After data is collected, the other development phase can be within a month. Gantt charts: Gantt chart is a bar chart that provides a visual view of tasks scheduled over time. A Gantt chart is used for planning projects of all sizes, and it is a useful way of showing what work is scheduled to be done on a specific day- It can also help you view the start and end dates of a project in one simple chart. In our project, we used Ms. Excel for developing the Gantt chart which is shown below in the figure.

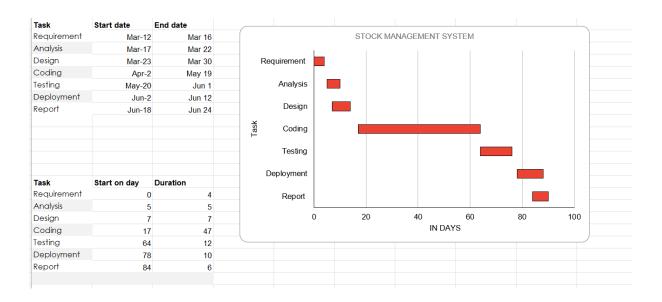


Fig 5: Gantt chart of Stock Management System

6. Expected Outcome

The Expected Outcome of this Project will be developing a Stock Management System with Proper Functionality, Validation and verification. In this System the Admin and Users will be able to login in the system, Create Purchase Order, Approve Orders, If the Orders are Partially approved then the not Approved order will be Displayed in Backorder, and will also be able to Create Return List then list will be added to the remaining stocks, and the Admin and Users will also be able to create Sales list and will be able to See the Remaining Stocks. The System will also generate the bill in printable format, PDF format and Excel format. Admin will only have the privileges to create and add Suppliers and Items in the system. The User and Admin will Both Be able to see the Analytics Part in the system. The analytics part will cover the Sales analytics, Purchase analytics, Top seller, Stocks Quantity analytics, and Quantity Flow in the system.

REFERENCES

- [1]techtarget.com, "techtarget.com,". [Online]. Available: https://www.techtarget.com/searchcio/definition/stock. [Accessed 1 5 2023].
- [2] erdplus.com, "erdplus.com", [Online]. Available: https://erdplus.com/standalone. [Accessed 5 5 2023].
- [3]researchgate.net."researchgate.net",[Online].Available:https://www.researchgate.net/publication.[Accessed 3 5 2023].
- [4] Ramesh singh saudh, System Analysis and Design, Ktm: KEC Publication, 2020(Revised).
- [5] Ramesh singh saudh, Software Engineering, Ktm: KEC Publication, 2020(Revised).
- [6] Alexandre de Castro Moura and Alessandra Angelucci, "A System for Stock Management of Clothing Retail Companies," Procedia Manufacturing, vol. 39, pp. 545-554, 2019.
- [7] G. H. Hashmi, M. H. Jamil, and A. I. Sheikh, "Development of an Automated Inventory Management System using RFID," International Journal of Advanced Computer Science and Applications, vol. 8, no. 5, pp. 322-327, 2017.
- [8] Imran Khan, "Development of an Inventory Management System for Small Business," International Journal of Computer Applications, vol. 180, no. 36, pp. 34-40, 2018.
- [9] Alexandre de Castro Moura and Alessandra Angelucci, "An Analysis of the Use of Barcodes and RFID in Stock Management of a Clothing Retail Company," Journal of the Brazilian Society of Mechanical Sciences and Engineering, vol. 41, no. 11, pp. 1-12, 2019.
- [10] J. A. N. Martins and J. M. F. Calado, "A Framework for Stock Management in Small and Medium-sized Enterprises," International Journal of Production Economics, vol. 132, no. 2, pp. 294-305, 2011.