CHAPTER 1

                                           PROJECT BACKGROUND

Rationale

In the dynamic and fast-paced world of fashion retail, efficient inventory management is crucial for maintaining smooth operations and ensuring customer satisfaction. The Queen’z Inventory System is designed to streamline inventory tracking and management for clothing businesses, offering a comprehensive solution to handle the complexities of stock control.

This system is specifically tailored for clothing retailers to help them maintain accurate and up-to-date records of their inventory. It provides the business owner with real-time insights into the availability of various clothing items, including details such as dress styles, colors, designs, and sizes. With this system, owners can easily monitor stock levels and make informed decisions to ensure that popular items are sufficiently stocked, while less popular ones are managed effectively to reduce excess inventory.

Additionally, the system empowers administrators with the capability to update and manage the inventory. Administrators can adjust stock levels, update the availability of specific clothing items, and ensure that the system reflects the most current status of the inventory. This feature helps in maintaining operational efficiency and prevents discrepancies that could lead to customer dissatisfaction or lost sales.

By integrating these functionalities into a unified system, the Clothing Business Inventory System enhances inventory management, reduces manual errors, and supports better decision-making. Ultimately, this system aims to improve the overall efficiency of clothing businesses, enabling them to respond swiftly to market demands and trends while keeping their inventory well-organized and optimized.

Statement of the Problem

The current inventory management process of Queen’s Clothing relies on manual record-keeping and spreadsheets, leading to inefficiencies such as inaccurate stock counts, delays in updating product availability, and challenges in tracking items across multiple locations. This often results in overstocking or understocking, which affects the company's ability to meet customer demand and optimize storage costs. The lack of an automated system also increases the risk of human errors and makes it difficult to generate real-time reports, hindering data-driven decision-making.

The business needs an automated inventory system that can streamline stock management, provide real-time updates on inventory levels, track product movements, and generate accurate reports to ensure efficient operations and customer satisfaction.

Objectives of the Study

* **Evaluate System Efficiency:** Assess how effectively the inventory system manages product listings, updates stock levels in real-time, processes transactions, and logs user activities to ensure accountability.
* **Enhance Customer Interaction:** Analyze how the system improves customer engagement by providing accurate product availability and seamless ordering processes.
* **Analyze Performance Data:** Investigate the system’s capability to generate real-time inventory reports and provide actionable insights through sales and performance analytics for informed decision-making.
* **Track User Activities:** Evaluate the effectiveness of the activity log feature in tracking user actions and providing administrators with transparency over system usage and potential security issues.
* **Identify Operational Challenges:** Identify any operational difficulties faced by businesses during the system’s implementation and usage, and suggest areas for improvement to enhance overall efficiency.

Significance of the Study

* **Operational Efficiency:** Provides insights into how the system enhances the efficiency of managing product inventory, transactions, and user activities, allowing for smoother operations and reduced human errors.
* **Customer Satisfaction:** Highlights how the system improves the shopping experience through accurate stock information, streamlined ordering processes, and better customer service, potentially increasing customer loyalty and repeat business.
* **Competitive Advantage:** Helps businesses stay competitive in the evolving e-commerce landscape by leveraging advanced system features, including real-time inventory management, activity logs, and performance analytics.
* **Strategic Insights:** Offers valuable data for businesses to make informed decisions about their sales strategies and operational practices through detailed performance analytics and user activity tracking.
* **Enhanced Accountability:** Demonstrates how the activity log feature enhances accountability by tracking user actions within the system, providing administrators with insights into system usage and security.

Definition of Terms

* I**nventory System:** A software tool designed to manage and track stock levels, product availability, and stock movements within a business. In this study, it refers to the Queen’z Clothing Inventory System.
* **Real-Time Inventory Management:** A feature of the system that allows for instantaneous updates on stock levels and product availability, ensuring that inventory data is current and accurate.
* **Stock Levels:** The quantity of each item available in the inventory. Maintaining proper stock levels is crucial to preventing overstocking or stockouts.
* **Activity Logs:** A system feature that records the actions performed by users (e.g., adding or updating stock), which helps in monitoring and accountability.
* **Admin:** The system user with the highest privileges who is responsible for overseeing and managing inventory operations, including monitoring activity logs.
* **Operational Efficiency:** The effectiveness with which a system or process functions in managing tasks, reducing errors, and improving performance in day-to-day operations.
* **Customer Engagement:** Interaction between the business and customers, often enhanced by providing accurate product availability and a smooth shopping experience.
* **Database:** A structured collection of data stored and managed electronically, typically on a server. In the context of the inventory system, the database stores all relevant information, such as product details, stock levels, user activity logs, and transaction records, ensuring data can be efficiently accessed, updated, and maintained by the system.
* **Stockouts:** Situations where inventory is depleted, and items are unavailable for sale. The system aims to prevent stockouts by offering real-time inventory insights.
* **Overstocking:** The accumulation of excess stock, which ties up resources and can lead to losses if items are not sold in a timely manner.
* Performance Analytics: Data analysis that provides insights into sales, inventory trends, and user activity, helping businesses make informed decisions.
* **Accountability:** The system's ability to track user actions and ensure that all changes to the inventory are recorded, contributing to transparency and security.

CHAPTER 2

**Review of Related Literature**

Inventory systems play an essential role in ensuring operational efficiency and cost-effectiveness, particularly in retail settings. Queen’s inventory system, as part of a broader context of inventory management, integrates technology and best practices to improve stock control, reduce losses, and enhance customer service. The following review of related literature highlights key findings on the implementation, benefits, and challenges of inventory management systems in retail businesses.

**Foreign Literature:** According to Thompson and Zhang (2018), the integration of cloud-based systems and real-time data analytics allows for enhanced visibility of inventory levels across multiple locations, improving decision-making and operational efficiency. Queen’s inventory system could benefit from adopting such technologies, particularly in terms of providing centralized control over inventory across various stores, both domestic and international. According to Stevenson (2020), effective inventory systems can improve stock visibility, enhance decision-making, and reduce losses due to overstocking or stockouts. In retail settings, where the ability to meet customer demand is critical, systems like Queen’s inventory system help ensure that stock levels are accurately tracked and that orders can be fulfilled promptly.

**Local Literature:** According to Cruz and Reyes (2018), the implementation of inventory systems in local businesses has shown significant improvements in stock accuracy and reductions in operational costs. For businesses like Queen’s, an efficient inventory system ensures that stock levels are accurately tracked across all stores, enabling the business to prevent stockouts or overstocking, which can directly affect profitability. Mendoza and Santiago (2019) emphasized that in the context of Philippine businesses, maintaining balanced inventory levels helps in preventing stockouts or overstocking. This is particularly important for Queen’s, which, like many other retail businesses, deals with multiple branches and diverse product offerings. An effective inventory system enables Queen’s to ensure that its stock levels are aligned with customer demand, thereby improving customer satisfaction and reducing operational costs. Santos and De Leon (2020) noted that Philippine retailers are increasingly adopting cloud-based inventory management systems. These systems allow businesses to track stock in real time, provide centralized control across multiple stores, and reduce the risk of human error. For Queen’s, integrating a cloud-based inventory system could lead to more efficient inventory management, especially in monitoring stock across various locations.

**FRAMEWORK**



