

Clothing Store Point of Sale System

Prepared By: Gabriel Sawaya

September 22, 2023

Introduction and Overview

The Point of Sale (POS) System is designed with the intent of making sales efficient for employees, keeping items located in the designated store organized through inventory updates, and handling transactions such as purchases and returns. The POS system will also aid in keeping track of sales through analytical reports which can be accessed by higher-ranked employees. This report details the user requirements of the device, expanding on the functions necessary for the device to perform as the client intends. System requirements, which describes both the functional and non-functional requirements, will demonstrate how the system is intended to perform through different use cases.

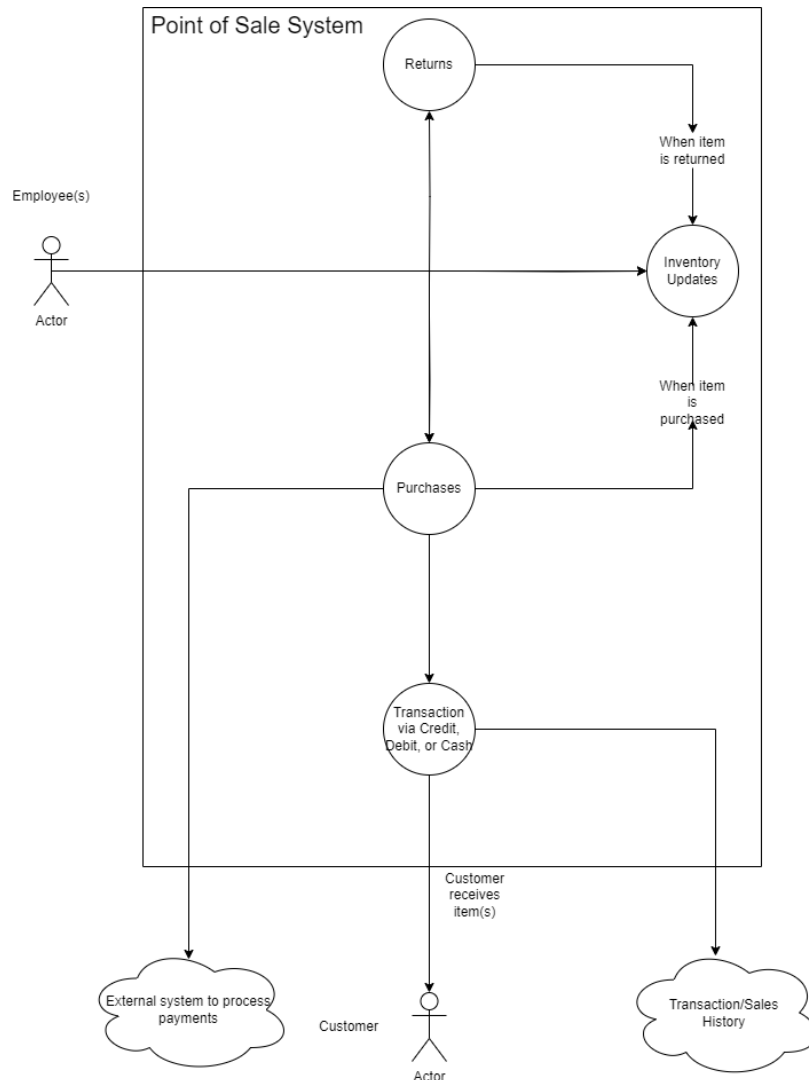
User Requirements

The POS system will provide ways in which to make sales easier for employees. Employees can checkout customers and accept payments via credit card, debit, or cash. These payments will be processed by external systems. Items are uniquely identified by item number, so employees are able to enter in the item number at checkout or they can scan the barcode of the item using a barcode scanner. Upon checking out, purchase total will be calculated, including sales tax, and inventory will be updated automatically when a transaction is complete. Transaction history is stored separately from the inventory and only administrative users have access to sales history. Returns are handled similarly to purchases. Employees can process a refund by entering the items either by item number or by scanning the item's barcode. Once a refund is processed, inventory should be automatically updated. Refunds are only provided in cash.

System Requirements

Functional Requirements

The main functions of the POS will include processing sales either by purchases or returns, inventory management, and managing sales history. Employees will be able to use the system to perform sales of clothes within the store through the use of scanners or looking up the item's number. Purchases are made via credit card, debit, or cash. Payments are processed through external systems. Inventory is automatically updated after every sale. When a purchase is made, inventory of the items purchased are updated to the current amount. If an item is returned, the inventory will be updated as well. Employees will also be able to search through inventory. Items within the store will be assigned attributes such as price, quantity, item/ID number, size, and color. Transaction history and sales history will be stored in separate cloud-based databases with access limited to administrative staff.



Non-functional Requirements

One of the qualities of the POS system is that it will be able to make purchases fast and efficiently for employees. Each item in the store will be identifiable via an item ID number as well as a barcode. When a customer is ready to checkout, the employee will either scan the item's barcode using a barcode scanner or by entering in the item's ID number. Employees will also be able to access and perform multiple operations on the store's inventory through the POS system. If an item needs to be added manually, or if the inventory of a specific item needs to be verified by an Employee, the Employee can search for the item based on the price of the item, the quantity of the item, the item's ID number, the size, and the color of the item. When a transaction is made, inventory will be automatically updated to reflect the change in inventory for items that are purchased. If there is a return for an item, the inventory will be automatically updated with the returned item included.

Other

Some functions of the POS system will require outside hardware/software, specifically for the data that will be collected, including sales, transactions and inventory. Inventory data, such as when items are purchased and/or returned, will be stored in a database that reflects these changes. All sales and transaction history will be stored in a database separate from inventory, and all data will be backed up to a cloud system. This data will be accessible only to administrative personnel and will be available to other store locations.