

Basic Software Requirements Specification

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1. Introduction and Overview

The purpose of the point-of-sales system is to streamline the work of users in the retail industry. The system will serve to run through requests and transactions at a quick pace, including features like processing sales and refunds, checking, updating, and searching inventory information, and holding transaction histories. These services positively affect both retail employees, who can make faster progress with their work, and customers, who will have a higher volume of their requests satisfied as a result of efficient work. This requirements specification document will outline the essential information for the implementation of this system, organized by User Requirements (how the system will be interacted with by users), System Requirements (split into Functional and Non-functional Requirements), and Other (relevant information that does not fall under the previous categories). Functional requirements entail specific functions and their workings, while Non-functional Requirements cover the general quality that the system should aim to achieve.

2. User Requirements

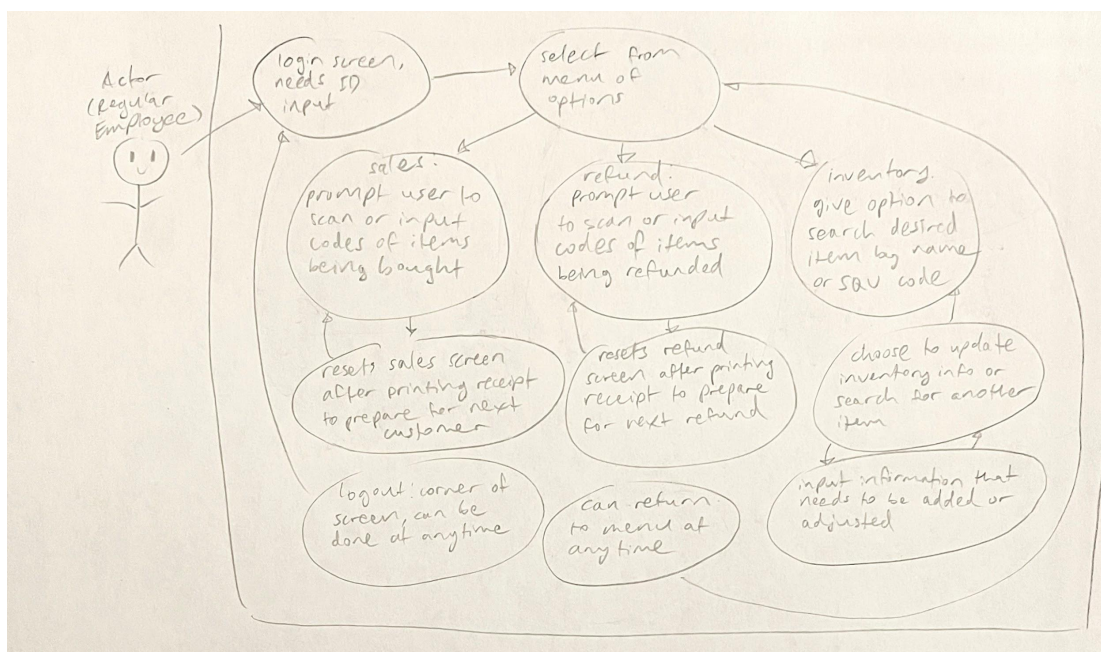
As mentioned above, the point-of-sales system should provide a variety of functions such as processing sales and refunds, managing inventory, and tracking transaction information. Such systems will mainly be placed at front desk registers, but can also be used on phones and tablets for quick accessibility. Different hierarchies in the workplace have different kinds of information to access (e.g. managers unlocking certain information that is inaccessible to regular employees). The system is expected to receive continuous updates in order to match the pace of the constantly-changing retail industry, and while the initial release should have English and Spanish as available languages for the system's text, more languages will likely be added with updates if deemed necessary.

3. System Requirements

3.1: Functional Requirements

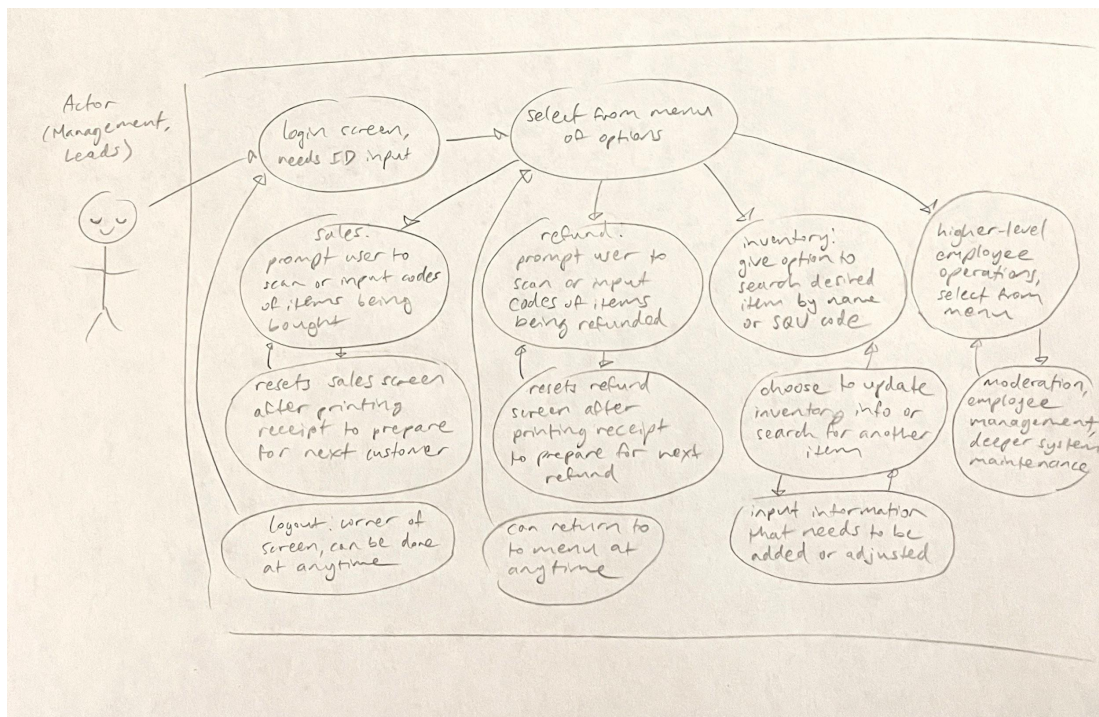
The various functions within the system are expected to only be accessed by workers of the specific retail store it is in. These workers can check and search through inventory information with a unique SQU code, while those who are assigned to inventory matters can update this information as needed. Checking an item displays information on the date it arrived at the store, the collection it is part of, its product ID, and how much of it is available in stock. Transaction histories are also held in the system and can be stored for up to two days. Sales transactions can take credit, debit, and EBT, but refunds will only be done with cash, with conditions being that the item is brought back within 30 days with a receipt. The system will reflect changes every 30 minutes.

Every employee has a unique ID that needs to be entered in the system to allow access, and it will be the managers' and leads' responsibility to log users out of the system when not in use, since the software will always be open from then on for convenience. Higher-level employees have access to moderation, employee management, and deeper system maintenance when inputting their ID's.



Use Case 1: Regular Employee

At the start of a retail store's hours, the system is automatically set to the login screen, where no other actions can be taken until a valid employee ID is inputted. Once logged in, the rest of the system's functions will stay accessible until the user manually logs out. From there, a menu with several options is presented for sales, refunds, and inventory matters. Sales is used for customer purchase transactions, which will help accept and calculate payments. Refunds helps process valid item returns. Inventory starts with a search for a specific item, then gives the option to update or change information about that item. With every transaction that is made, the system will automatically clear the information so the next transaction can be processed. The system will stay in whatever section it is in unless the user selects otherwise. Actions that can be taken anytime are manually logging out or going back to the original menu of options.



Use Case 2: Management & Leads

Overall, higher-level employees have access to all the functions that regular employees do along with an extra menu option of features only accessible by said higher-level employees, which includes management and more thorough system maintenance. This option can only be accessed if the employee ID inputted for login belongs to a manager/lead.

3.2: Non-functional Requirements

It is important for the system to run as quickly and correctly as possible, to be a benefit for workers in a fast-paced environment when in use rather than a hindrance, making user efficiency and performance imperative qualities to focus on. Reliability would also be desired so that the likelihood of malfunctions interrupting the work of employees is lowered. Each of these qualities serve to facilitate the transactions executed in the retail environment.

4. Other

It is expected that updates will be implemented after the product's release to improve and fix any functions that may hinder the system. As previously mentioned, additional languages are a potential future addition to aid workers who may not be comfortable with English or Spanish, which would make the system more widely accessible. To further ensure the accessibility of this system, there will likely be changes or other options for user interface included in updates so that users can lightly edit the system in a way that will let them work more comfortably and efficiently (e.g. light or dark mode, text-to-speech). If there are ways to make the system easier to learn and navigate for new hires, that should also be implemented if possible.