

The AFT Team

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Purpose

The purpose of our software project is to create software that will be run on a computer that serves as a cash register in a food store. The cash register software will facilitate scanning out items, and receiving payment from the customer.

Functionality

There will be two types of users of our software, cashiers and managers.

Cashiers

Cashiers will be the most common users, and they will have access to the essential functions of a cash register. This includes scanning (entering the UPC/PLU) items and receiving payment. For age restricted items, the cashier will require a manager to validate the sale. For items incorrectly priced, the cashier will also have to call a manager in order to change the price of an item. Cashiers will also be able to sign customers up for a points card.

Managers

The manager user will have the ability check the current amount of money in the cash register, withdraw money from the drawer (when it becomes too full), change the price of an item (if the item is marked incorrectly), and a manager is required to validate the sale of age restricted items. Age restricted items will have a UPC code beginning with 999 to symbolize it is age restricted. To access manager privileges, the manager will have to enter their 4 digit pin.

Members

Customers will be able to sign up for a points card at the register. The points card entitles customers to cheaper prices, and they also get points for spending money at the store. After a certain amount of points, the customer will receive a 10% discount on their purchase, and their points will be reset to zero.

Schemas

The list of schemas for this project are as follows:

- Manager(employeeID, name, pin#)
- Cashier(employeeID, name)
- GeneralItem(name, stock, price, sale price, member price, UPC)
- Produce(name, stock, price, sale price, member price, PLU)
- AgeRestrictedItem(name, stock, price, sale price, required age, UPC)
- Member(memberID, name, points)

Is it Interesting?

Our software is interesting because cash register software is very common, and being a person who has had the *privilege* of working as a cashier, I know that cash register software can be a real pain. The design can be so unintuitive. Example: the customer wants to purchase hot house tomatoes. Intuition says you'll find hot house tomatoes under "H", (because the software only allowed the user to search by first letter), but no, it is found under "T", and the list of produce that is shown that "starts with T" isn't even alphabetized. Our software will solve this problem by providing an easy and friendly user experience to any users of our system.

Similar Software

Our goal is not to create something new, but to create a better version of something that already exists. Obviously, cash register software already exists. Nextar, Vend, Copper, and Chromis are all examples of free cash register software.