Use Cases of Stock Control System

Boundary Classes

1. Computer (one object)
2. Till (one object)

Use Cases

Initialization:

1. <Load Suppliers> key is pressed
   Read a supplier file and store the information in the system
2. <Load Stock> key is pressed
   Read an item file and store the information in the system

From Till

1. A bar code is scanned (<Scan> key is pressed)
   If it is for a new transaction (receipt), create a transaction
   Read a bar code and identify the stock item.
   Display the name and price of the stock item (if the item is not found, display an error message)
   Record the name and price of the stock item and the number of items in the transaction.
   (if the stock item is found in the transaction, increment its number of items)
2. <Total> key is pressed
   Display the current transaction (if there is no current transaction, display an error message) -- display a list of the name and price of the stock item and the number of items being purchased, followed by the total price for the transaction
   For each item in the transaction, decrement the stock level of the stock information.
   Mark the current transaction to be done
3. <Balance> key is pressed
   Display a list of all transactions (see the "<Total> key pressed" use-case) since the <Clear> key was pressed last time (or since the system is booted), followed by the total amount of money received in the transaction
4. <Clear> key is pressed
   Clear all transactions

From Computer

1. <List All Suppliers> key is pressed
   List all suppliers (each line consists of the key, name, address, and phone number of a supplier)
2. <List All Stock> key is pressed
   List all stock Items (each line consists of the key, name, bar code, price, threshold, number of items in stack, and preferred supplier (its key, name, address, and phone number) of a stock item)
3. <List Scarce Stock> key is pressed
   List stock items of which number is below its threshold (each line consists of the key, name, number of items, threshold of a scarce item followed by its preferred supplier information (its key, name, address, and phone number))
4. <Order> key is pressed
   Given a stock item key and the number of items to order, create an order (see <List Outstanding Order> use case for information to store)
   The order information stores the date and time at which the order is created
   (if the item is not found, display an error message)
5. <List Outstanding Orders> key is pressed
   List all outstanding orders in chronological order
   (each line consists of (1) the date, time, (2) the number of items to order, (3) the key, name, the number of items in stock, threshold of the item, and (4) the key, name, address, and phone number of the supplier)
6. <Restock> key is pressed
   Given the stock item key, find the corresponding outstanding order and restock the number of items found in the order.
   Remove the order
   (if the order for the item is not found, display an error message)
7. <End> key is pressed
   Terminate the program