The Scrumbags

CSE 216

Process Sale Use Case (Fully Dressed)

Primary Actor: Cashier

Main Success Scenario:

1. The customer brings items to either the cashier operated cash register.
2. The cashier scans each item or manually enters its product ID as well as the quantity purchased.
3. System fetches the price per item from the database, multiplies it by the quantity purchased, and displays it on the cashier’s or customer’s monitor as a list of purchased items.
4. Repeat steps 2-3 until all items are scanned.
5. After all items have been accounted for, the final price is displayed on the screen.
6. Tax software is used to calculate the amount of the task, which is displayed on the monitor and added to the total price.
7. If credit is used, the card is swiped and a credit software is used to perform a credit check on the credit card number.
8. If cash is used, cashier enters amount of cash paid into the keyboard. The system then subtracts that amount from the total price, including tax, to determine the customer’s change.
9. The system updates accounts receivable and inventory of items purchased in the database.
10. System records date, time, location of the sale in the database.
11. If customer pays with cash. Then, the cashier retrieves the change from the cash register and gives it to the customer.

Extension Scenarios:

\*a. At any time, manager can override any operation by the system entering “manager mode.”

\*b. At any time, if system fails, system supports recovering all transaction states.

\*c At any time, cashier should be able to suspend the sale for any reason.

2a. System fails to detect scanned product ID or manually entered one. Should show error on monitor.

2b. Cashier enters wrong quantity of items purchased. System should support a “delete item” option from the list.

2c. Unique items like gift cards or flowers requires manual category code and price entry.

3a. System fails to find the price of the item in the database. Should show error on monitor.

6a. System fails to detect communication with tax calculation software. Should show error on monitor.

6b. Customer says they have credit in their account or a discount. Discount is applied to purchase.

7a. System fails to detect communication with credit check software. Should show error on monitor.

7b. Credit check is not verified. Payment from credit card should not be accepted.

7c. Custom informs cashier that they have a tax-exempt status, and cashier must verify.

9a. System fails to verify that quantity purchased equals quantity deducted from inventory. Should show error on monitor.

9b. Multiple registers attempt to update inventory on the same item. Database must lock items during a transaction to ensure no loss of information.

11a. Customer requests receipt, so must have a printer.