

Name: Scan Items

Participating actor(s): Customer

Precondition: Customer selects to start

Main flow of events:

1. Customer scans product
2. Price per unit is added to total
3. Customer moves scanned product to bagging area
4. Revised current total is displayed for the Customer

Postcondition: Current total is updated

Alternative flow 1:

2. Product is weighed with a scale
3. Price per kilogram is added to total
4. Customer moves scanned product to bagging area
5. Revised current total is displayed for the Customer

Alternative flow 2:

2. Product code is not in store database
3. Current total is not revised

Name: Price per Unit

Participating actor(s): Customer

Precondition: Scanned product is priced per unit

Main flow of events:

1. Price of one unit is added to current total
2. Revised current total is displayed for the Customer

Postcondition: Current total is updated

Alternative flow:

1. Customer enters quantity of product
2. Price per unit entered is added to current total
3. Revised current total is displayed for the Customer

Name: Price per Kilogram

Participating actor(s): Customer

Precondition: Scanned product is priced per kilogram

Main flow of events:

1. Customer weighs product on the electrical scale
2. Price per kilogram is added to current total
3. Revised current total is displayed for the Customer

Postcondition: Current total is updated

Name: Checkout

Participating actor(s): Customer

Precondition: Customer selects to finish

Main flow of events:

1. Final total is displayed to Customer
2. Methods of payments are displayed to Customer
3. Customer pays by cash

Postcondition: Remaining balance is displayed to the Customer

Alternative flow:

3. Customer pays by card

Name: Pay by Card

Participating actor(s): Customer

Precondition: Customer selects to pay by card

Main flow of events:

1. Customer enters in card pin number
2. Approved screen is displayed to Customer
3. Remaining balance is displayed to the Customer
4. Ending message is displayed to Customer

Postcondition: Receipt is printed

Alternative flow:

2. Declined screen is displayed to Customer
3. Remaining balance is displayed to the Customer
4. Method of payment is displayed to the Customer

Name: Pay by Cash

Participating actor(s): Customer

Precondition: Customer selects to pay by cash, Customer inserts valid cash

Main flow of events:

1. Value of cash is added to current total
2. Revised balance total is displayed to the Customer

Postcondition: Balance total is updated

Alternative flow:

3. Customer pays more than the total cost
4. Change due is displayed to the Customer
5. Machine dispenses change to the Customer

Name: Dispense Change

Participating actor(s): Customer

Precondition: Customer pays more in cash than the total cost

Main flow of events:

1. Change due is displayed to the Customer
2. Coins are dispensed to the coin tray

Postcondition: Balance total is updated

Alternative flow 1:

2. Banknotes are dispense from the machine

Alternative flow 2:

2. Banknotes and coins are dispensed from the machine

Name: Validate Cash

Participating actor(s): Customer

Precondition: Customer selects to pay by cash

Main flow of events:

1. Customer inserts cash into the machine
2. Value of cash is added to current balance
3. Revised current balance is displayed for the Customer

Postcondition: Current balance is updated

Alternative flow:

2. Invalid cash is returned to Customer
3. Current balance is not revised

Name: Retrieve Receipt

Participating actor(s): Customer

Precondition: Customer finished scanning and ready to pay

Main flow of events:

1. Customer pays the balance
2. Printer prints product information
3. Printer cuts the paper at appropriate length

Postcondition: Customer retrieves receipt

Alternative flow:

1. Customer card gets declined
2. Printer prints that payment did not go through
3. Printer cuts the paper at appropriate length

Name: Unload Cash Storage

Participating actor(s): Operator

Precondition: Operator must verify themselves and alert system that they are about to unload cash

Main flow of events:

1. Operator physically opens the storage section of the machine with a key
2. Operator retrieves the cash from the storage
3. Operator locks machine
4. Operator starts up machine to function regularly

Postcondition: Cash storage is empty

Alternative flow:

3. Operator does not lock machine
4. Machine cannot be started up to function regularly