**Pseudo-code**

struct Product

slotID;

sku;

quantity;

maxQuantity;

minQuantity;

price;

Description;

1. Reset list, Product (struct members), receipt
2. Minimum = 2
3. When somebody touches the keypad then go to next step
4. Set hardware control to active state
5. Show message “Please select an item(s) : “ on the display
6. Which product? Select the row (button) -> Ask for the slot ID Here\*\* Redundant no?
7. Scan for slotID // by row (Alphabetical) and row number
8. If quantity = 0
9. Display “Inventory is empty!” (go to step 4)
10. Add the product to the list for the receipt
11. Subtract quantity – 1 for that sku on that slot ID
12. Check if the quantity of that sku is less than two then call a recorder (if the minimum is less than or equal to quantity then record the sku)
13. Ask the user if they need more products if yes prompt user for another slot ID and add it to the list of receipt (go to step 4), if not go to next step
14. Show user the list of items they intend to purchase
15. 15. Ask customer(s) if the products and quantity is what they want if not go to step 1 and do it from the beginning. or process Cancel if they want to cancel the process of buying items otherwise go to next step
16. Process Pay/Checkout (list)
17. If the Pay/Checkout was successful, release product according to the list to the shooting route.
18. if the Pay/Checkout was unsuccessful process pay/Checkout again
19. Print receipt and give it to the customer(s)
20. Show thanks for the shopping message on the screen
21. Set control to Idle while another customer touches the keypad.
22. End

struct 'Transaction'

slotID;

quantity;

price;

description;

list\_SIZE;

//Payment Pseudo-code:

1.Set hardware control to "payment" state

2.Take the information about order from "active" state

3.Count total amount of all items.

4.Display the amount on the display and message "Do you want to pay?"

5.Activate "Enter", "Correct", "Cancel" and "Pay" buttons

6.scan for user input

7.If the costumer pressed "Cancel" button, finish the operation and set hardware control to "idle\ready" state.

8.If they pressed "Correct" button, go to "Active" state.

9.If they pressed "Enter" button, show message "Input or swipe or tap your debit/credit card" "NO CASH is Accepted".

10.Show the total amount on the screen.

11.Activate Payment Module.

12.if the Payment went through it returns 0 and if it was unsuccessful it returns 1

13.return the appropriate result (according to the previous step) to the Active function (returns control to the Active function)

14.End.

//Cancel Pseudo-code:

1. Set the hardware to "Cancel" state

2. Set timer

3. Activate Display

4. Show message "Operation is canceling!"

5. when 3 seconds are gone, stop timer.

6. Go to Idle\ready state.

7. End