POS Automatic Foodie Menu

Requirements

You are required to implement a POS(point of sale system) to automatically let the user access from range of items from different categories. The POS will enhance the productivity of the shop and reduce unnecessary labor cost for the shop owner, provide unique customer experiences as well as having a high chance of customers return.

The POS implementation will be divided into 4 phrases with each phrase helps increasing the advancement of the system.

Phrase I

You are required to implement the menu screen for POS. When user access POS for the first time, POS will need to display its stored categories, you are not required to have a dynamic number of categories, however, it is a good practice to implement in such way for the menu can be expanded.

After all the required categories have been displayed, POS will need to ask user to make a selection by enter the number corresponding to the order of categories displayed on POS. For example:

1) Hamburger
2) Noodles
3) Fired Food

User are required to enter number from 1 to 3 to make valid selection, if any other keywords have been pressed, an error message "Your selection is invalid!! Try again" in **red** has to display to user to let them know that the selection is invalid, the system will then have to display the categories again and let the user starts over.

If user make a valid selection on the category screen, POS has to automatically display number of items that belongs to the selected category. And similar to the first screen, user make selection by entering a valid number except you only have to print a message "You have selected <item name>" and retained on this screen.

for each of the screen displayed by POS, at the end of displaying the items or category, there should be an extra option that will let user to go back or exit the system. This extra option is depended on the current screen:

- If user is at category screen, then this option will let the user exit the system when selected, the label must be "Exit POS"

- If user is at any other screens, then this option will let the user back to the previous screen and must be labelled as "Go Back". For example: if user goes Category → Item → View Ingredients, when select option go back, the Item screen must be display instead of Category.

All the screen must have title to indicate which screen that POS is currently at. For example: if user is at category screen, then POS must have title "POS FOODIE CATGORY", if Item screen is currently showing, then title will be "POS FOODIE ITEM", etc.

Phrase II

After phrase I is completed, phrase II will improve POS to let user adds items into their cart. After user has made a valid selection in item screen, that Item will be added into their cart, please note that user can add **any items from any categories** to the same cart.

POS will need to be improved and let user see what items they have added into their cart. To do this, POS will provide another extra option on Category Screen that let user access the cart. From previous phrase, there was only one extra option to let user exit the system, in this phrase, POS is required to have 2 extra options with the "exit" option to be the last option for user to select (Refer to phrase I) . In addition, POS will have to be smart enough to display the "Access Cart Option":

- If user has not added any items, then this option will not be available for user to access, hence, not displaying it on screen.
- If user has added item into their cart, then this option must be displayed before the "Exit option"

When user make a selection to access the card, POS will need to display the list of items have been added by the user. It is critical at this point that POS does not display anything else but just the list of the items that user added(that means no menu to be displayed while this screen is showing) until user press Enter key then POS will display the menu again.

Phrase III(Semi Advance)

In this phrase, POS will need to improve customer cart screen to provide options:

- Clear selected item
- Clear entire cart.

When clear selected item option is selected, the list of item need to be label in numeric order 1, 2 , 3, etc. when user make a valid selection, the selected item must be removed from the cart and POS will display the remaining items within the card.

Bonus: after a selected item is deleted, the numbers must be sorted and display from 1, 2, 3, etc. For example: user has 3 items in their cart displayed as follow:

1) Rice
2) Noodle
3) Steak

If user select Noodle to be removed, then POS will need to display:

1) Rice
2) Steak

When clear the entire cart is selected, all the items will need to be removed. User will then be navigated back to the Category Screen without "Access Cart" option display(refer to phrase II)

Bonus: POS will need to group the item added into distinct item with quantity, as phrase II is completed, the list can contains duplicated items, this will need to be resolve in this phrase. For example:

> **Phrase II cart:** Rice, Rolls, Noodles, Rice

> **Phrase III to-be cart:** Rice Quantity: 2, Rolls Quantity: 1, Noodles Quantity: 1

Please display the items and their quantity in readable way for the user, the above just the outline of what this requirement is required.

Phrase IV(OOP Advance)

Design the option for Cart screen that let user pays for the item. In this phrase, you are not required to code, however, you are required to construct a blue print of the feature in OOP style, in order to do this, you need to do a thorough research on OOP. Contact if needs help.