***Venting-machine***

*The main idea is to create Venting machine using python programming language,*

***Basic applications such as:***

* *Display menu of Snacks and Drinks*
* *Comments that explain key operations*
* *Correct change returned to a user*
* *Code of an item*
* *Message that tells particular item has been dispensed*

***Advance applications:***

* *Categorizing an item*
* *Allowing user to buy additional item*
* *Handelling errors*
* *Recommending user to purchase related item(ex:if you pick milk it will give cookie)*

***I made:***

* *All from the above*
* *Ability to close the programm at the start*
* *Project (*[*https://github.com/Rashidello/Venting-machine*](https://github.com/Rashidello/Venting-machine)*)*

*Flowchart*

*#dictionary for venting machine*

*def dic():*

*global item,additem*

*additem = 0*

*item = {*

*933 : {*

*"Code" : 933,*

*"Item": "Soda",*

*"Category": "Drink",*

*"Price" : 4,*

*"Stock" : 3*

*},*

*209 : {*

*"Code" : 209,*

*"Item" : "Milk",*

*"Category" : "Drink",*

*"Price" : 4,*

*"Stock" : 5*

*},*

*311 : {*

*"Code" : 311,*

*"Item" : "Mentos",*

*"Category": "Snack",*

*"Price" : 1,*

*"Stock": 2*

*},*

*878 : {*

*"Code" : 878,*

*"Item" : "Cookie",*

*"Category" : "Snack",*

*"Price" : 2,*

*"Stock" : 1,*

*},*

*767 : {*

*"Code" : 767,*

*"Item" : "Chips",*

*"Category" : "Snack",*

*"Price" : 2,*

*"Stock" : 0,*

*},*

*343 : {*

*"Code" : 343,*

*"Item" : "Ice tea",*

*"Category" : "Drink",*

*"Price" : 4,*

*"Stock" : 5*

*}*

*}*

*start()*

*def userinput():*

*global userchoice*

*userchoice = int(input("Choose an item using their code "))*

*#checks if item in the vending machine is present*

*if userchoice in item:*

*#checks stock of userchoice*

*if item[userchoice]["Stock"] == 0:*

*print("sorry, we're out of chips, please try again\n")*

*userinput()*

*#343 doesn't have any additional snacks*

*elif userchoice == 343:*

*print(f"You have chosen {item[userchoice]['Item']}, it will cost {item[userchoice]['Price'] } AED")*

*payment()*

*else:*

*print(f"You have chosen {item[userchoice]['Item']}, it will cost {item[userchoice]['Price'] } AED")*

*recommendations()*

*else:*

*print("It's not there:<")*

*start()*

*def recommendations():*

*#classic*

*global additem*

*if userchoice == 933:*

*additem = input("Would you like to have some Mentos?(y/n): ")*

*if additem == 'y':*

*additem = 311*

*#cancels additional item if it's stock equals to 0*

*if item[additem]["Stock"] == 0:*

*print(f"Sorry we're out of {item[additem]['Item']}")*

*additem = 0*

*payment()*

*else:*

*additem = 0*

*payment()*

*#classic v2*

*elif userchoice == 311:*

*additem = input("Would you like to have some Soda?(y/n): ")*

*if additem == 'y':*

*additem = 933*

*if item[additem]["Stock"] == 0:*

*print(f"Sorry we're out of {item[additem]['Item']}")*

*additem = 0*

*payment()*

*else:*

*additem = 0*

*payment()*

*elif userchoice == 209:*

*additem = input("Would you like to have some Cookie?(y/n): ")*

*if additem == "y":*

*additem = 878*

*if item[additem]["Stock"] == 0:*

*print(f"Sorry we're out of {item[additem]['Item']}")*

*additem = 0*

*payment()*

*else:*

*additem = 0*

*payment()*

*elif userchoice == 878:*

*additem = input("Would you like to have some Milk?(y/n): ")*

*if additem == 'y':*

*additem = 209*

*if item[additem]['Stock'] == 0:*

*print(f"Sorry we're out of {item[additem]['Item']}")*

*additem = 0*

*payment()*

*else:*

*additem = 0*

*payment()*

*else:*

*#2:52am*

*print("You broke the system!")*

*#fucntion where payment is going*

*def payment():*

*#global variable*

*global additem*

*#to check whether we have two items for total amount to pay*

*if additem > 0:*

*totalamount = item[userchoice]['Price'] + item[additem]['Price']*

*else:*

*totalamount = item[userchoice]["Price"]*

*userwallet = int(input(f"pay {totalamount} AED "))*

*#checks if user gave correct amount of money*

*if userwallet < totalamount:*

*print("Pay the required amount")*

*payment()*

*userwallet = userwallet - totalamount*

*#shows items bought by user and user's change*

*if additem > 0:*

*print(f"You got {item[userchoice]['Item']} and {item[additem]['Item']}\nYour change is {userwallet}")*

*else:*

*print(f"You got {item[userchoice]['Item']}\nYour change is {userwallet}")*

*#Stock substraction*

*item[userchoice]["Stock"] -= 1*

*if additem > 0:*

*item[additem]["Stock"] -= 1*

*#repeat if user wants*

*repeat = input("Wanna buy something again?(y/n) ")*

*if repeat == 'y':*

*#updating value in variable "additem" because additional item would be saved even if u have chosen one item*

*additem = 0*

*start()*

*else:*

*exit()*

*#start of an code*

*def start():*

*print("Welcome! here's some stuff that we have:>\n")*

*#prints items using for loop*

*for keys,values in item.items():*

*print(f"Code: {values['Code']}, Item: {values['Item']}, Category: {values['Category']}, Price: {values['Price']}, Stock: {values['Stock']}")*

*#users options with numbers*

*fchoice = int(input("\nUser's options:\n1.Cancel\n2.Choose category:snack\n3.Choose category:drinks\n4.Choose an item\n(1-4)\n"))*

*if fchoice == 1:*

*print("Bye bye!")*

*exit()*

*#option 2 & 3 are using for loop to show spesicic category and have function for user's input*

*elif fchoice == 2:*

*print("")*

*for keys, values in item[767].items():*

*print(f"{keys} : {values}")*

*print("")*

*for keys, values in item[311].items():*

*print(f"{keys} : {values}")*

*print("")*

*for keys, values in item[878].items():*

*print(f"{keys} : {values}")*

*userinput()*

*elif fchoice == 3:*

*print("")*

*for keys,values in item[343].items():*

*print(f"{keys} : {values}")*

*print("")*

*for keys, values in item[933].items():*

*print(f"{keys} : {values}")*

*print("")*

*for keys, values in item[311].items():*

*print(f"{keys} : {values}")*

*userinput()*

*elif fchoice == 4:*

*userinput()*

*#restarts program incase user writes any other nomber except 1-4*

*else:*

*print("Wrong!\nTry again!!")*

*start()*

*dic()*