THE NERDS

Shopping List Algorithm

FUTURE MARKETING SOCIETY

TOPICS

THE NERDS

- INTRO
- PROBLEMS
- SOLVES
- PREDICTS
- EXPLANATION
- FLOWCHARTS
- CODE
- MEMBERS
- REFFERENCES

THE NERDS

INTRODUCTION

- We are using the searching sorting algorithms on online shopping platforms using Google Colab and the search and sorting techniques we acquired in this course.
- Customers may look up a certain product via search.
- Customers may sort their products based on pricing by using the Sorting feature.

ANALYZING

1st

SHOPPING ISSUE

2nd

IMPROVE

3rd

PREDICT AND SOLVING

4th

FEEDBACK

ALGORITHM

How are we applying algorithms?

- Using sorting and searching, we may choose which goods to purchase by comparing the pricing of the items we already purchased. Users will be able to buy more conveniently by using this algorithm system.

FURTHERMORE

EFFICIENT

Capable of producing desired results with little or no waste (as of time or materials)

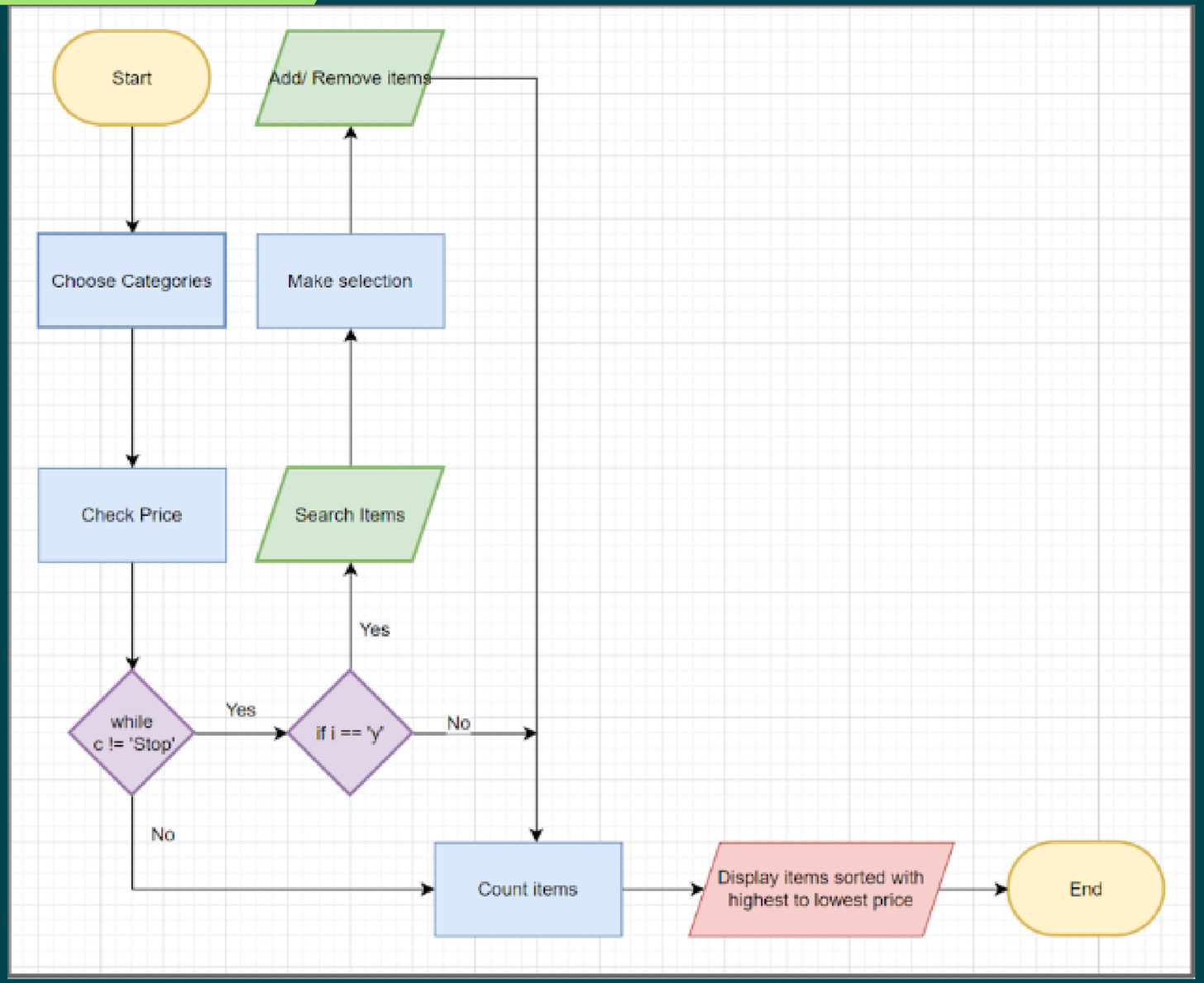
ACCURACY

The condition or quality of being true, correct, or exact; freedom from error or defect; precision or exactness; correctness.

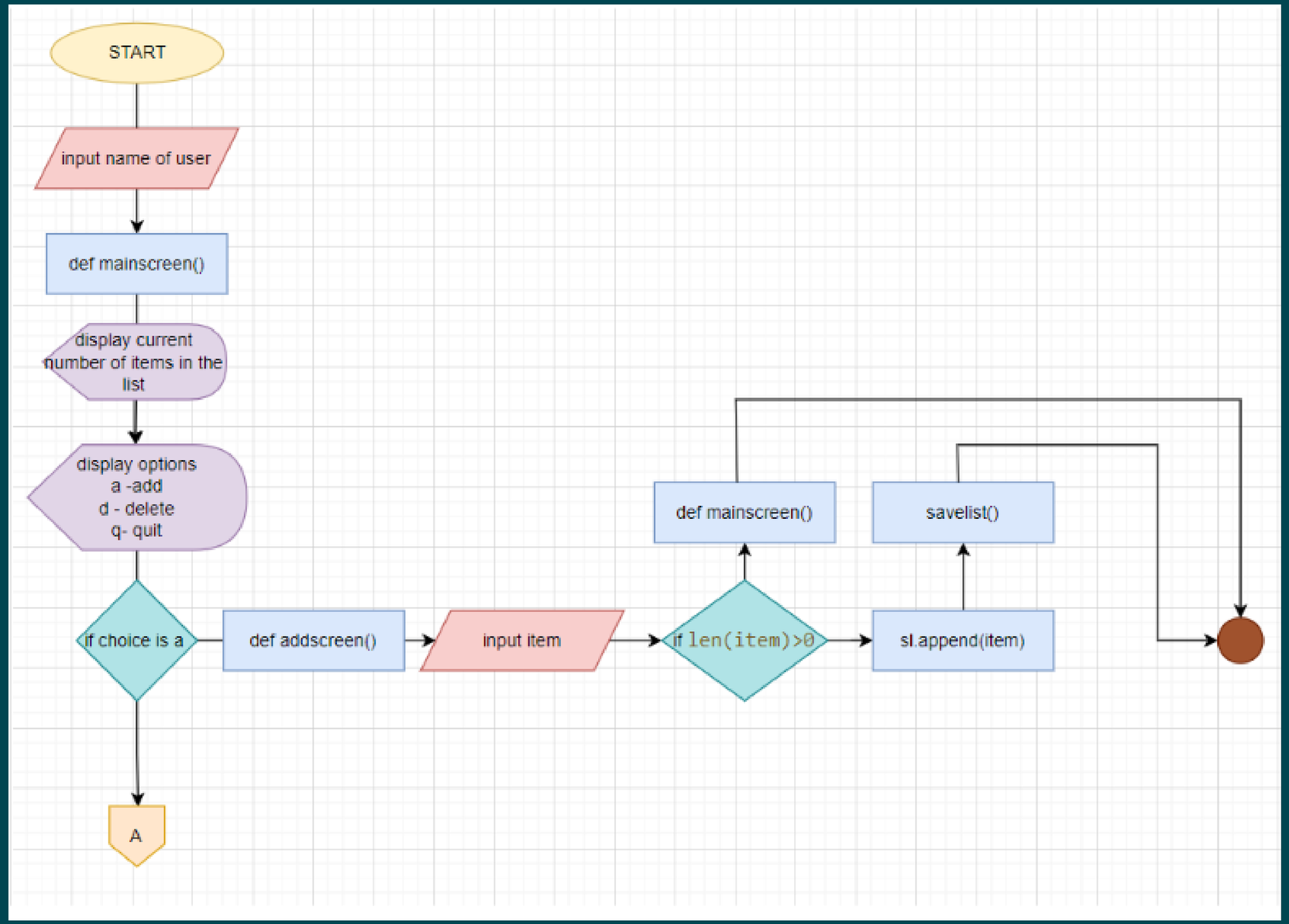
VALUABLE

Having considerable monetary worth; costing or bringing a high price

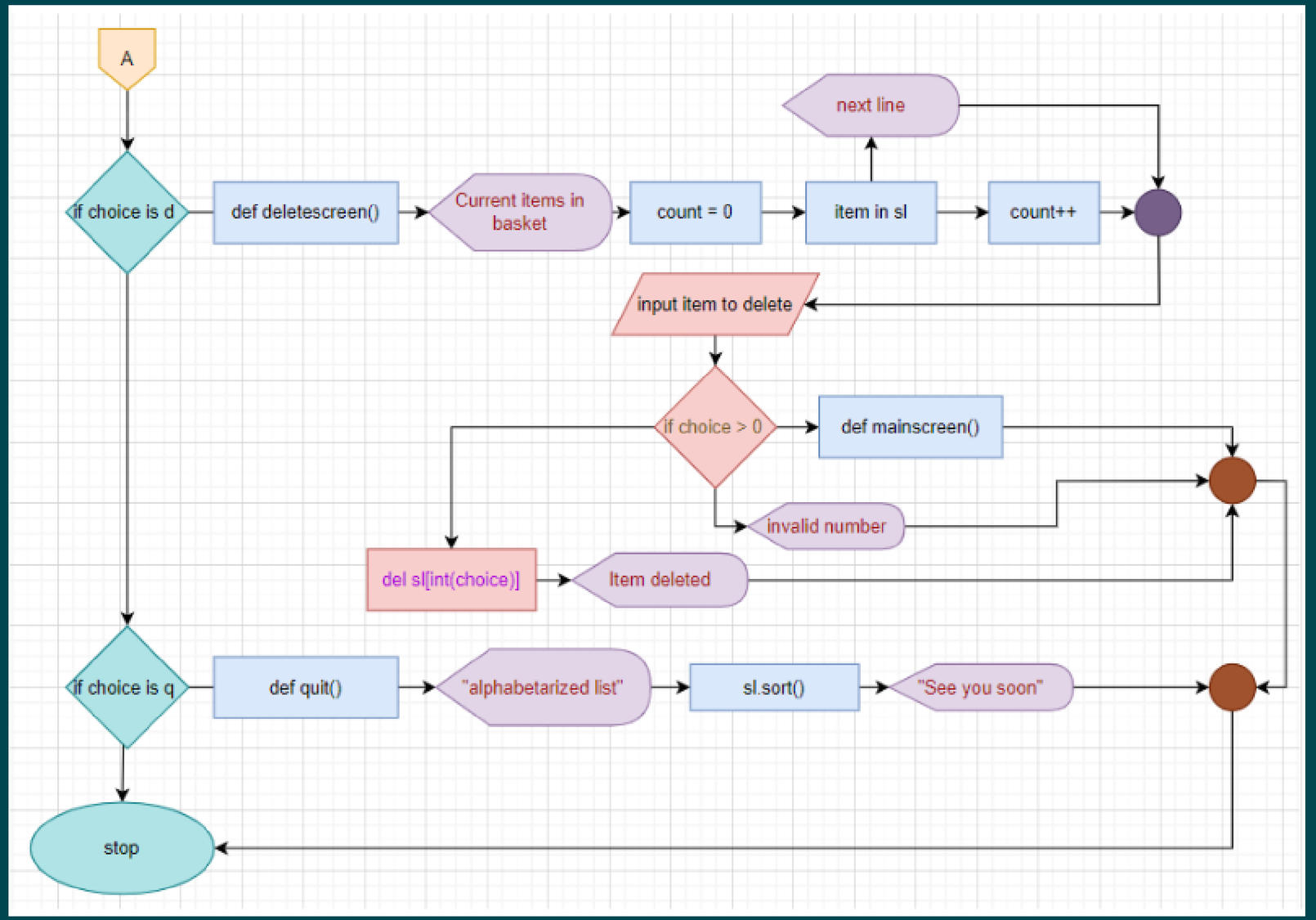
FLOWCHART

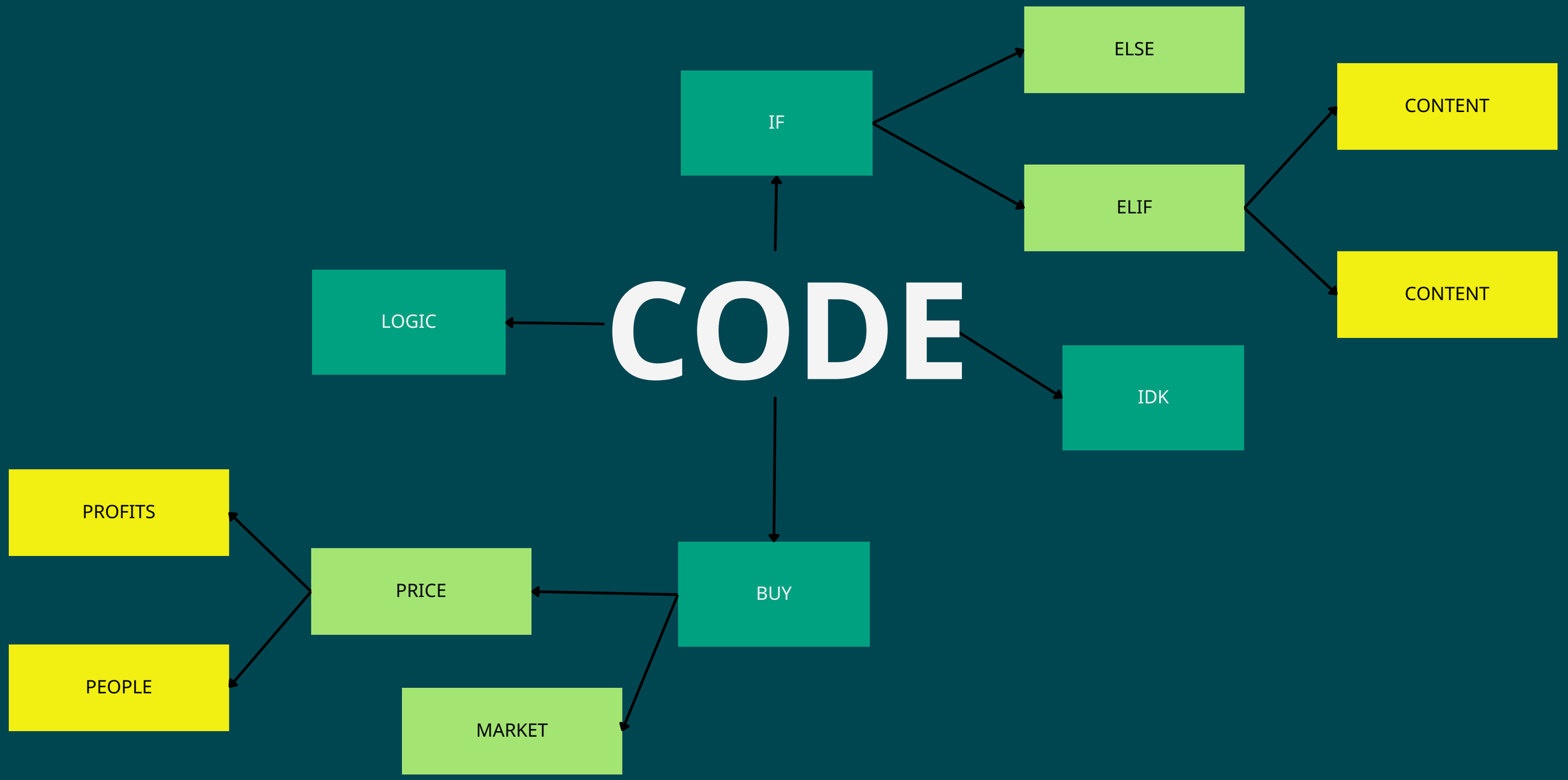

Start
Add/ Remove items
Choose Categories
Make selection
Check Price
Search Items
Yes
while
c != 'Stop'
Yes
if i == 'y'
No
No
Count items
Display items sorted with
highest to lowest price
End

FLOWCHART


START
input name of user
def mainscreen()
display current number of items in the list
display options
a -add
d - delete
q- quit
if choice is a
def addscreen()
input item
if len(item)>0
def mainscreen()
savelist()
sl.append(item)
A

FLOWCHART


A
if choice is d
def deletescreen()
Current items in basket
count = 0
item in sl
count++
next line
input item to delete
if choice > 0
def mainscreen()
invalid number
del sl[int(choice)]
Item deleted
if choice is q
def quit()
"alphabetarized list"
sl.sort()
"See you soon"
stop


CODE
IF
ELSE
ELIF
CONTENT
CONTENT
LOGIC
IDK
BUY
PRICE
PROFITS
PEOPLE
MARKET

```
[8] from google.colab import drive
    drive.mount('/content/drive')
```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
```

```
#import the .txt file from drive to display the items available
from google.colab import drive
import pandas as pd
#drive.mount('/content/drive')
print("Items list")
#drive/MyDrive/Items.txt
def list():
  f = open("Items.txt", "r")
  print(f.read())

list()
```

```
Items list
No.     Item    Price
1       Soap    17
2       Coke    20
3       Water   10
4       Apples  40
5       Oranges 35
6       Candy   12
7       Bread   42
8       Eggs    45
9       Jam     35
10      Sugar   30
```

```
import os,sys,time

# Taking input from the user
name = input("Enter your name: ")

# Output
print("Hello", name)

sl = []
bill = 0


#shopping list -> sl
#bill -> bill

#function for main menu
def mainScreen():
  os.system('cls')
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("        SHOPPING LIST    ")
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("\n\nYour basket contains",len(sl),"items.\n")
  print("Please choose from the following options:\n")
  print("(a)dd to the list")
  print("(d)elete from the list")
  print("(q)uit the program")
  choice = input("\nchoice: ")
  if len(choice) > 0:
    if choice.lower()[0] == "a":
      addScreen()
    elif choice.lower()[0] == "d":
      deleteScreen()


    elif choice.lower()[0] == "q":
      quit()
    else:
      mainScreen()
  else:
    mainScreen()

#function for adding items
def addScreen():
  global sl
  global bill
  os.system('cls')
  print('\n')
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("        ADD SCREEN    ")
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("\n")
  print("From the list above, please enter the name of the item that you want to add.")
  print("Press ENTER to return to the main menu.\n")
  item = input("\nItem: ")
  if len(item) > 0:
    sl.append(item)
    print("Item added :-)")
    saveList()
    time.sleep(1)
    addScreen()
  else:
    mainScreen()
```

```python
#function for deleting items
def deleteScreen():
  global sl
  global bill
  os.system('cls')
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("       DELETE SCREEN    ")
  print("%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%")
  print("Current items in basket:")
  count = 0
  for item in sl:
    print(count, " - ", item)
    count = count + 1
  print('\n')
  print("Press the number of the item to delete\nIf not press enter to go back to the mainscreen.")
  choice = input("number: ")
  if len(choice) > 0:
    try:
      del sl[int(choice)]
      print("Iten deleted...")
      savelist()
      time.sleep(1)
    except:
      print("Invalid number")
      time.sleep(1)
    deleteScreen()

  else:
    mainScreen()
```

```python
#function for saving items
def saveList():
    f = open("shopping2.txt", "w")
    for item in sl:
      f.write(item+"\n")
    f.close()

#function after quiting from the code
def quit():
  print('Here is your alphabetized shopping list.')
  sl.sort()
  for listitem in sl:
    print(listitem)
  print("*********Thank You********")
  print("Hope to see you back soon!")

mainScreen()
```

Displaying items available.

```
Items list
No.     Item    Price
1       Soap    17
2       Coke    20
3       Water   10
4       Apples  40
5       Oranges 35
6       Candy   12
7       Bread   42
8       Eggs    45
9       Jam     35
10      Sugar   30
```

Initialize program and make choice ‘’a’’

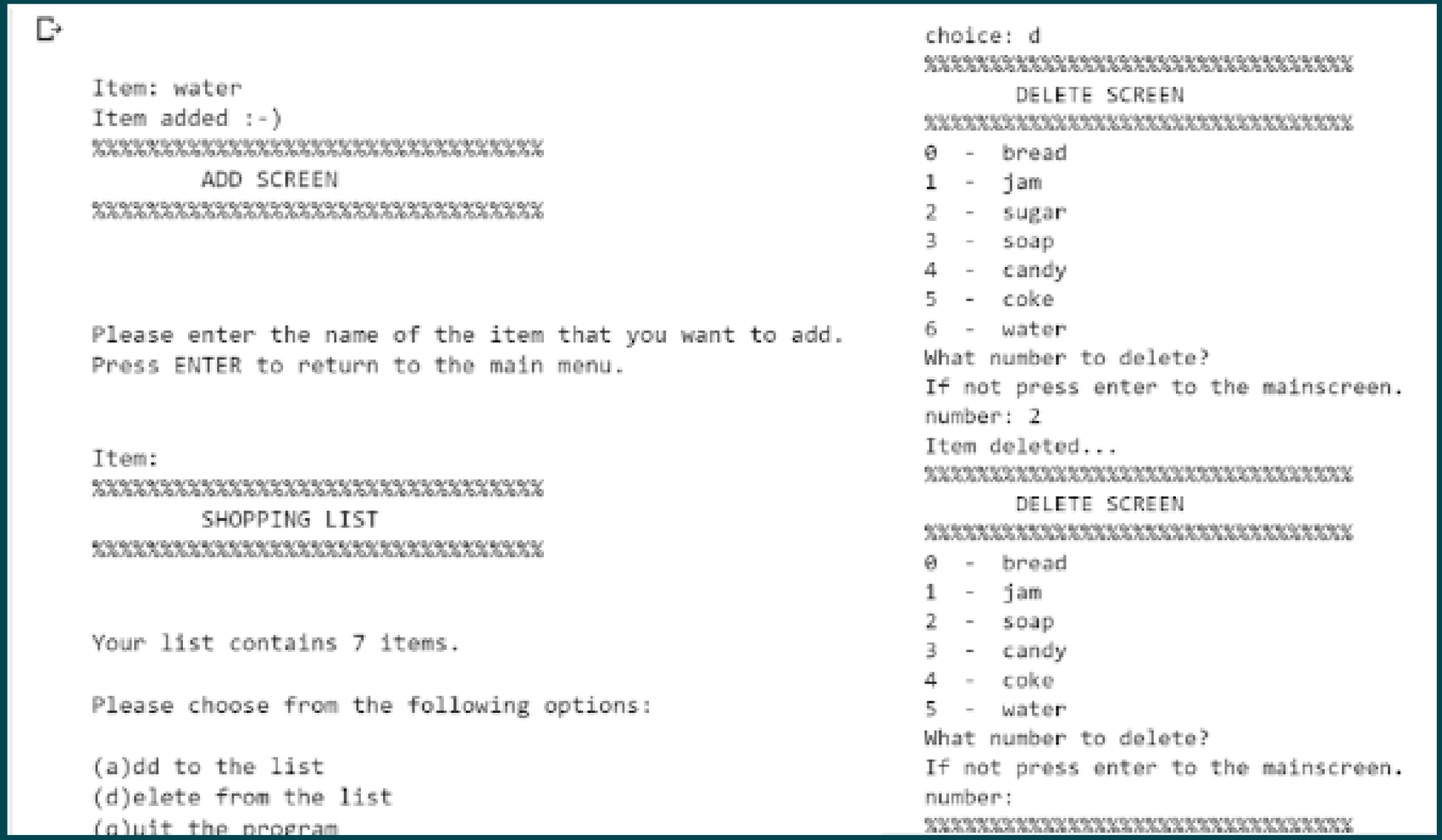
```
Enter your nameUser
Hello User
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        SHOPPING LIST
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


Your list contains 0 items.

Please choose from the following options:

(a)dd to the list
(d)elete from the list
(q)uit the program

choice: a
```

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: bread
Item added :-)
```

```
Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: jam
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: sugar
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: soap
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

```
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: candy
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: coke
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item: water
```

Press ‘’enter’’ and then choose ‘’d’’



```
Item: water
Item added :-)
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        ADD SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%



Please enter the name of the item that you want to add.
Press ENTER to return to the main menu.


Item:
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        SHOPPING LIST
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


Your list contains 7 items.

Please choose from the following options:

(a)dd to the list
(d)elete from the list
(q)uit the program
```

```
choice: d
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        DELETE SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
0  -  bread
1  -  jam
2  -  sugar
3  -  soap
4  -  candy
5  -  coke
6  -  water
What number to delete?
If not press enter to the mainscreen.
number: 2
Item deleted...
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        DELETE SCREEN
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
0  -  bread
1  -  jam
2  -  soap
3  -  candy
4  -  coke
5  -  water
What number to delete?
If not press enter to the mainscreen.
number:
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

Quit from the program

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
        SHOPPING LIST
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


Your list contains 6 items.

Please choose from the following options:

(a)dd to the list
(d)elete from the list
(q)uit the program

choice: q
Here is your alphabetized shopping list.
bread
candy
coke
jam
soap
water
*********Thank You********
Hope to see you back soon!
```

REFERENCES

Flowchart
https://drive.google.com/file/d/16QoFhF5kpju8PKJ-MFlJBs1iG2CLcLWe/view?usp=sharing

Source Code
https://colab.research.google.com/drive/1gus7G0hnmDma9NVy9iDWOb0UrHKeEby-#scrollTo=9U3mPOeho1ia

Youtube link: https://www.youtube.com/watch?v=BPtUw3ekRlg

THE NERDS

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THANK YOU