UNIVERSITI TEKNOLOGI MARA KEDAH BRANCH

SCHOOL OF INFORMATION SCIENCE

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

DIPLOMA IN LIBRARY INFORMATICS (CDIM144)

PROGRAMMING FOR LIBRARIES
(IML208)

REPORT ON INDIVIDUAL PROJECT:
TIKITAKA CAFÉ SYSTEM

PREPARED BY:

NUREDLYNA RANIA BINTI MOHD FADZLY	2022466394
FARAH AIN BINTI MOHD PADZLI	2022661474
MUHAMMAD NASHRUL HAKIMIE BIN SUPARDI	2022489454
MUHAMMAD AFHAM BIN MAHATHIR	2022616736

GROUP:
KCDIM1443C

PREPARED FOR:

EN. MOHD FIRDAUS BIN MOHD HELMI

SUBMISSION DATE:
17TH JANUARY 2024

PROJECT NAME:

TIKITAKA CAFE SYSTEM

FILE NAME:

TIKITAKACAFESYSTEM.py

ACKNOWLEDGEMENT

We want to start by expressing our heartfelt gratitude to The Almighty God for His help and mercy in enabling us to complete this assignment. Without His willingness and guidance, we wouldn't have been able to accomplish it. We are truly grateful for His blessings throughout this journey. We would also like to extend a special thank you to our lecturer, Sir Firdaus for his constant support and guidance. His expertise and dedication were instrumental in helping us navigate through the assignment. We are truly thankful for his patience and willingness to answer our questions, which greatly contributed to our understanding of the subject matter.

Furthermore, we want to acknowledge the assistance and support we received from our classmates in KCDIM1443C. Their advice, motivation, and availability played a significant role in our successful completion of the assignment. Whenever we faced difficulties or had questions, they were always ready to lend a helping hand. We are truly grateful for their camaraderie and collaborative spirit.

Lastly, we would like to express our sincere appreciation to University Technology Mara (UITM) Cawangan Kedah for providing us with the opportunity to undertake this writing report assignment. The resources and facilities available at the university were crucial in conducting research and gathering relevant information. We are thankful for the education and experiences we have gained from UITM, which have contributed immensely to our academic and personal growth.

TABLE OF CONTENT

1.0 BACKGROUND OF THE SYSTEM

The TIKITAKA café system is a web-based tool that primarily focus on how admin manage the order of the food and beverage to the customer. Smoothies, coffee, desserts, and so on are a few examples. Admin are first required to enter customer's personal data, like name and phone number to take an order. Additionally, admin can utilize this system to place customer's orders and choose the menu they want. It is also easy for admin calculate the price through this system because it will automatically calculate the entire cost of the customer's purchases including the tax. Admin and customer are two components that make up the system. Apart from that, admin will send the receipt to the customer via email or print. Customers just need to enter their email address, and admin will send it to them. Admin also can search the receipt by entering the bill number and the receipt will view in the bill area.

2.0 PROBLEM STATEMENT

1. Difficult to track back-order menu due to doesn't have any bill number.

2. Lack of organized ordering system causing difficulties in record management.

3. Inefficient payment calculation leading to the profit loss.

3.0 FLOWCHART AND PSEUDOCODE
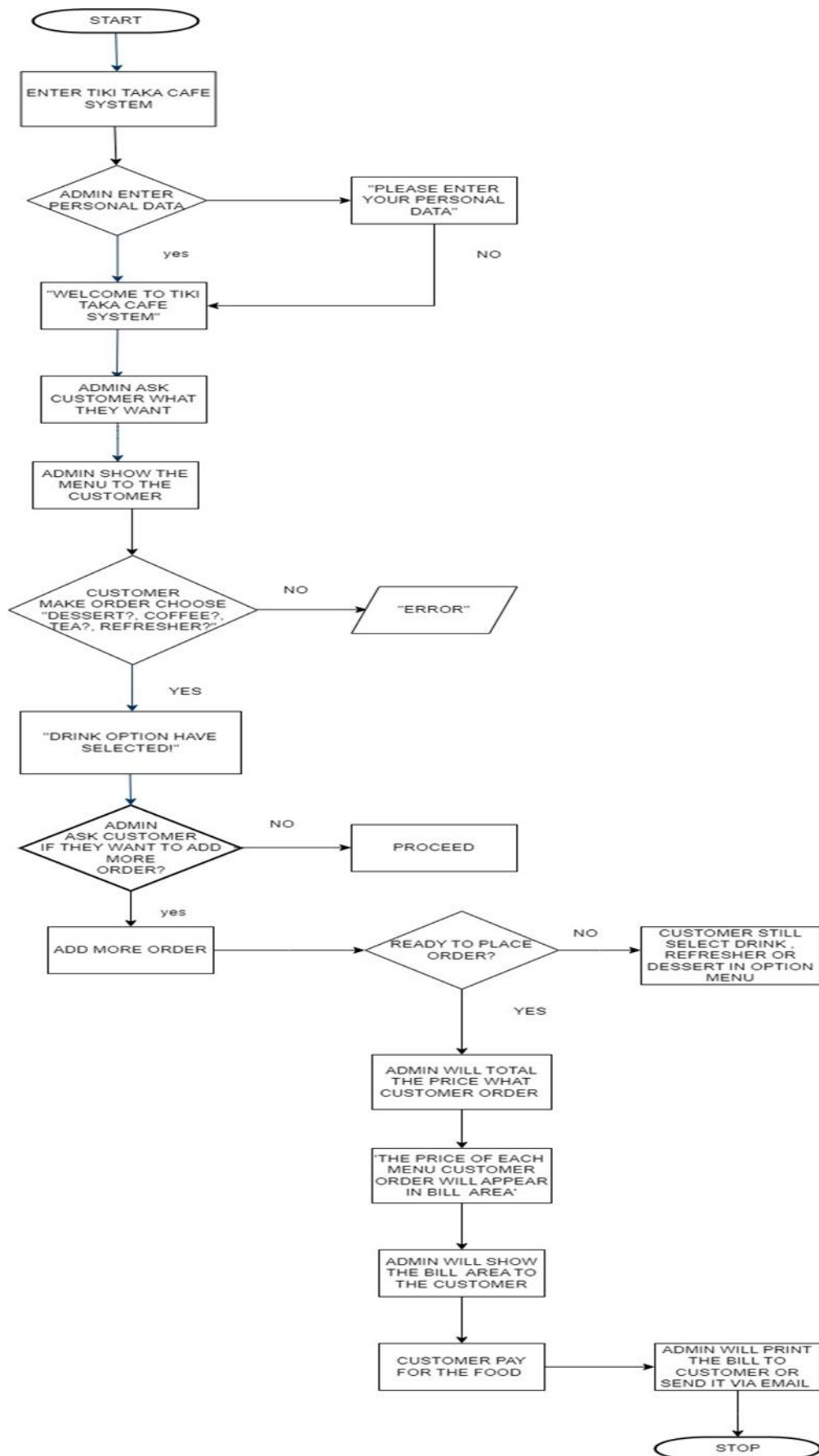
START

ENTER TIKI TAKA CAFÉ SYSTEM

ADMIN ENTER PERSONAL DATA

    IF NO

      "PLEASE ENTER YOUR PERSONAL DATA"

    IF YES

      "WELCOME TO TIKI TAKA CAFÉ SYSTEM"

ADMIN ASK CUSTOMER WHAT THEY WANT

ADMIN SHOW THE MENU TO THE CUSTOMER

CUSTOMER MAKE ORDER CHOOSE "DESSERT?, COFFEE?, TEA?, REFRESHER?"

    IF NO

      "OUTPUT: ERROR"

    IF YES

      "DRINK OPTION HAVE SELECTED!"

ADMIN ASK CUSTOMER IF THEY WANT TO ADD MORE ORDER

    IF NO

      PROCEED

    IF YES

      "ADD MORE ORDER AND QUANTITY"

READY TO PLACE ORDER?

    IF NO

      "CUSTOMER STILL SELECT DRINK, REFRESHER OR DESSERT IN OPTION MENU"

    IF YES

      "ADMIN WILL TOTAL THE PRICE WHAT CUSTOMER ORDER"

"THE PRICE OF EACH MENU CUSTOMER ORDER WILL APPEAR IN BILL AREA"

"ADMIN WILL SHOW THE BILL AREA TO THE CUSTOMER"

"CUSTOMER PAY FOR THE FOOD"

"ADMIN WILL PRINT THE BILL TO CUSTOMER OR SEND IT VIA EMAIL"

STOP

4.0 STRENGTH OF THE SYSTEM

1. Colourful styling for visual appeal

The programme looks better since buttons, entry widgets, and labels have vibrant styling. The user experience may be enhanced by this attention to design.

2. Readability of Data

The pricing of each meal and drink that a customer order will be shown in the bill area of this Tiki-Taka café system.

3. Dropdown Selections Option Menu

Users can choose from established alternatives in a convenient and visually appealing way by using the Option Menu for food, drink they want and quantity.

4. Verification and Error Management

Before submitting the order, the programme incorporates validation tests to make sure that all required fields are filled out. When there are problems, error messages give users helpful feedback.

5. Functionality:

Expense tracking, tax calculation, and email notification capability are all demonstrated by your code. Also, taxes and costs seem to be computed using the right rationale.

5.0 KAIZEN (ROOM OF IMPROVEMENT)

1. GUI Design:

Maybe next time we can use a more streamlined, contemporary GUI design if possible. We would like to consider enhancing our GUI system to make it more visually appealing with use of different colours, fonts, or images, or even use a GUI library that provides more advanced widgets.

2. Error Handling:

Put in place stronger error-handling procedures. For example, give users clear error warnings and respond more tactfully to unexpected problems.

3. Security Consideration:

Security should always be considered when working with user input or other services. Inputs should be cleaned, sensitive data should be handled securely, and secure coding best practices should be followed. By any chance, we want to make user accounts which we could add user accounts with different permissions. Thus, our system will be more secure.

4. Gmail verification improvement

As every time we need send the data, we always need to do 2 step verification. Therefore, we think we need to set up our café personal Gmail account which is make user easier and quickly send the data through the email without 2 step verification.

6.0 GRAPHIC USER INTERFACE (GUI) – YES

Figure 1.0: Interface of the system

7.0 RESULT OF THE SYSTEM

1. Admin can enter the details such as name and phone number in "Customer Details" section.

Figure 2.0: "Customer Details" are filled by admin

2. After admin fill the customer details, admin will choose any menu in "Refresher", "Coffee" and "Desserts" section based on customer option.

Figure 3.0: User choose the menu

3. Then, after admin click total button, price for refresher, coffee and dessert will be total up including with tax for each section.

Figure 4.0: The total price of refresher, coffee and dessert

4. Next, admin need to click bill button and the message box " Do you want to save the bill?" will appear.

Figure 5.0: The message box "Do you want to save the bill?" are shown

5. If admin click "Yes", the message box " Bill numberXXX is saved succesfully !" will appear and it will auto save in "Bill Area" ,and if admin click "No" then nothing happen.

Figure 6.0: The bill receipt saved successfully in the "Bill Area"

6. After done click yes or no for the save receipt bill, this will show up. If admin want to print the receipt, admin can click the print button.

Figure 7.0: Admin need to click print button to print receipt

7. After admin click the print button, the receipt will show up in notes.

Figure 8.0: The bill receipt is shown in the notes

8. Additionally, admin can send the receipt to email by clicking the email button. Admin need to fill the sender's details such as sender email and password and admin also need to fill the recipient's email to send the receipt to customer. Then, click send button.

Figure 9.0: Bill receipt will be sent through email

9. As we can see here, the customer successfully received the receipt file through email.
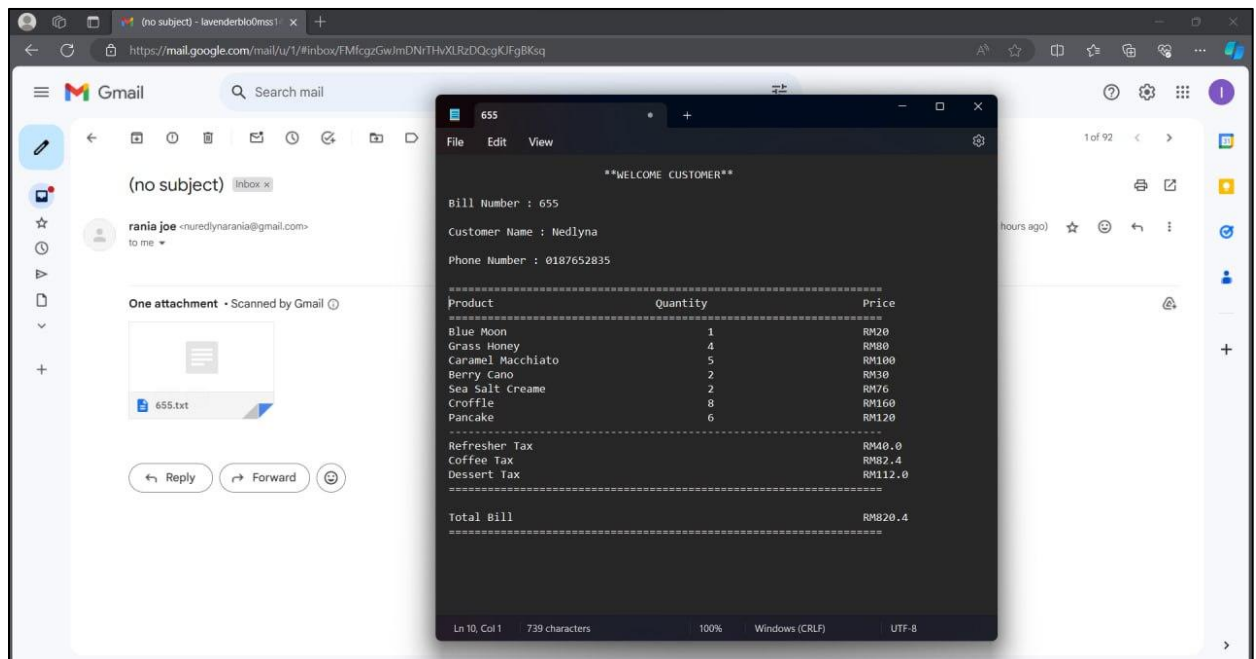
Figure 10.0: The receipt file received through email

10. Furthermore, if admin want to clear the data, admin can click the clear button.

Figure 11.0: Clear button used for clear all data

11. After admin click the clear button, all data will be clear.

Figure 12.0: The all data has been cleared

12. Lastly, admin can search the data in the system by key in the bill number.

Figure 13.0: Admin search data by key in the bill number

13. After that, the data will show up in the "Bill Area". It will make easier for admin to find the data in the system.

Figure 14.0: The data show up in the "Bill Area"

8.0 PROMPT DATA

- i. Name
- ii. Phone Number
- iii. Total Price
- iv. Bill
- v. Email
- vi. Print
- vii. Clear
- viii. Search

9.0 FUNCTION DATA

- i. Create data
- ii. Read data
- iii. Update data
- iv. Delete existing data
- v. Calculate data
- vi. Search data
- vii. Print data
- viii. Send data

10.0 CONDITIONAL STATEMENT – YES

```python
def save_bill():
    global billnumber
    result=messagebox.askyesno('Confirm', 'Do you want to save the bill?')
    if result:
        bill_content=textarea.get(1.0, END)
        file=open(f'bills/{billnumber}.txt', 'w')
        file.write(bill_content)
        file.close()
        messagebox.showinfo('Success', f'bill number{billnumber} is saved successfully')
        billnumber = random.randint (500,1000)


billnumber=random.randint(500,1000)

def bill_area():
    if nameEntry.get()=='' or phoneEntry.get()=='':
        messagebox.showerror('Error', 'Customer Details Are Required')
    elif refresherpriceEntry.get()=='' and coffeepriceEntry.get()=='' and dessertpriceEntry.get()=='':
        messagebox.showerror('Error', 'No Product Are Selected')
    elif refresherpriceEntry.get()=='RM 0' and coffeepriceEntry.get()=='RM 0' and dessertpriceEntry.get()=='RM 0':
        messagebox.showerror('Error', 'No Products Are Selected')
    else:
        textarea.delete(1.0, END)
```

Figure 15.0: Conditional statement used in python