



**UNIVERSITI TEKNOLOGI MARA,  
MERBOK, KEDAH  
FACULTY OF SCIENCE STUDIES,  
COLLEGE OF COMPUTING, INFORMATICS AND MEDIA STUDIES  
DIPLOMA IN LIBRARY INFORMATICS  
(KCDIM144)**

**PROGRAMMING FOR LIBRARIES  
(IML208)**

**INDIVIDUAL ASSIGNMENT: Design And Develop One Simple Computer Interface  
Which Consist Of CRUD**

**(Create, Read, Update & Delete) operations.**

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SUBMISSION DATE: WEEK 13**

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**UNIVERSITI TEKNOLOGI MARA (UITM) CAWANGAN KEDAH**

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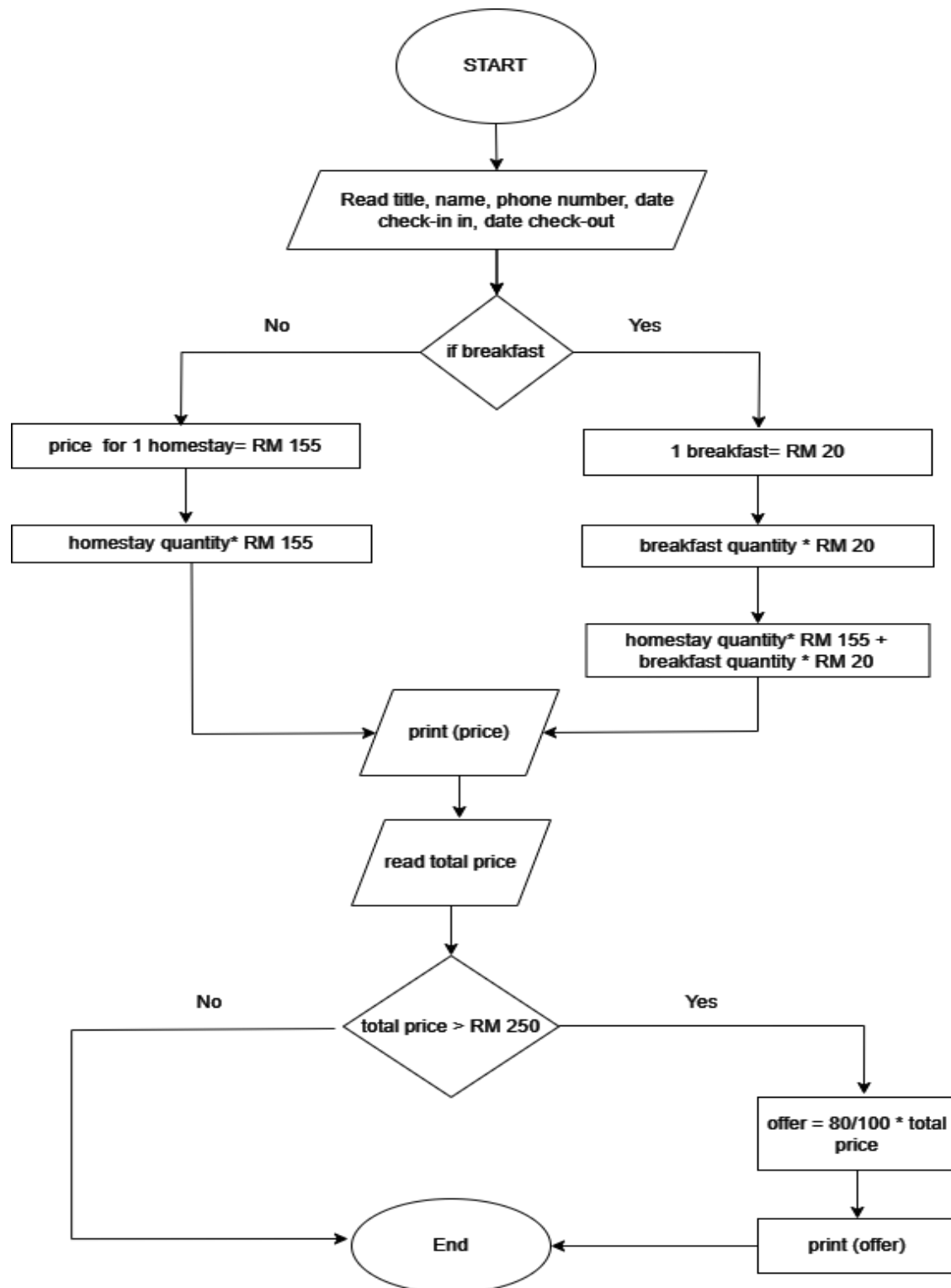
## 1.0 Introduction

The implementation of the individual assignment this time is aimed at training students to create one simple computer interface that consists of CRUD (create, read, update, delete). In my assignment, I only need to use the create and read methods. I have implemented the assignment using the real method. The computer interface that I have implemented is homestay booking. Of course, to make it easier for users to book a homestay, I need to design an interface that can enter user information to book a homestay.

To start the execution of the task, I used Python code to design a form of GUI (Graphical User Interface). The correct use of coding is a matter that needs to be emphasized when performing this task. In my GUI, there is information about title, name, phone number, check-in date, check-out date, homestay quantity, breakfast quantity, and total price. For this homestay booking, I have already applied a 20% discount to the total price that exceeds RM 250.

The method of functioning records entered in the GUI needs to be connected to MySQL. MySQL works to enter records into a database. So, when the user enters information in the GUI, the information will be stored in the database.

## 2.0 Flowchart



### 3.0 Coddling

```
assignment_ind.py > total
1  import tkinter
2  import mysql.connector
3  from tkinter import ttk
4  from tkcalendar import DateEntry
5
6  import mysql.connector
7
8  # Connect to your MySQL database
9  mydb = mysql.connector.connect(
10     host="localhost",
11     user="root",
12     password="",
13     database="homestay_booking")
14
15  # Create a cursor object to execute SQL queries
16  mycursor = mydb.cursor()
17
18  window = tkinter.Tk()
19  window.title ("Data entry form")
20
21  frame = tkinter.Frame(window)
22  frame.pack()
23
24  # Saving Customer Information
25  user_info_frame = tkinter.LabelFrame (frame, text = "Customer Information", bg='PapayaWhip')
26  user_info_frame.grid (row= 0, column= 0, padx=30 , pady=30)
27
28  title_label = tkinter.Label(user_info_frame, text= "Title",bg="orange")
29  title_combobox = ttk.Combobox (user_info_frame, values = ["Mr.", "Mrs.", "Miss"])
30  title_label.grid(row= 2, column= 0, padx=10, pady=10)
31  title_combobox.grid(row= 2, column= 1)
32
33  name_label= tkinter.Label(user_info_frame, text = "Name",bg="orange")
34  name_label.grid (row= 3, column=0, padx=10, pady=10 )
35  name_entry=tkinter.Entry(user_info_frame)
36  name_entry.grid(row= 3 , column= 1)
37
```

```

38 phone_label = tkinter.Label(user_info_frame, text= "Phone Number",bg="orange")
39 phone_label.grid(row= 4, column= 0,padx=10,pady=10)
40 phone_entry=tkinter.Entry(user_info_frame)
41 phone_entry.grid(row= 4 , column= 1)
42
43 #Date Check-in
44 date_label= tkinter.Label(user_info_frame, text = "Date Check-In",bg="orange")
45 date_label.grid (row= 6, column= 0,padx=10,pady=10)
46
47 def my_in(*args):
48     l1.config(text=ddt.get())
49     ddt= tkinter.StringVar()
50
51     cal1=DateEntry(user_info_frame, selectmode= 'day', textvariable=ddt)
52     cal1.grid(row=7, column=0)
53
54     l1=tkinter.Label(user_info_frame, bg='pink')
55     l1.grid(row=5,column=0)
56

```

```

57 ddt.trace('w', my_in)
58
59 #Date Check-out
60 out_label= tkinter.Label(user_info_frame, text = "Date Check-Out",bg="orange")
61 out_label.grid (row= 6, column= 1,padx=10,pady=10)
62
63 def my_date(*args):
64     l2.config(text=sel.get())
65     sel= tkinter.StringVar()
66
67     cal2=DateEntry(user_info_frame, selectmode= 'day', textvariable=sel)
68     cal2.grid(row=7, column=1)
69
70     l2=tkinter.Label(user_info_frame, bg='red')
71     l2.grid(row=5,column=1)
72
73     sel.trace('w', my_date)
74

```

```

75 #Homestay price
76 homestay_label=tkinter.Label(user_info_frame,text="Homestay",bg="orange")
77 homestay_label.grid (row= 8, column= 0,padx=10,pady=10)
78 breakfast_label=tkinter.Label(user_info_frame, text= "Breakfast",bg="orange")
79 breakfast_label.grid (row= 8, column= 1,padx=10,pady=10)
80
81 homestay=tkinter.IntVar()
82 breakfast=tkinter.IntVar()
83
84 homestay_quantity = tkinter.Entry(user_info_frame,textvariable=homestay)
85 homestay_quantity.grid(row= 9,column= 0)
86 breakfast_quantity = tkinter.Entry (user_info_frame, textvariable=breakfast)
87 breakfast_quantity.grid(row= 9,column= 1)
88

```

```

89 #Calculation
90 def total():
91     homestay=int (homestay_quantity.get())*155
92     breakfast= int(breakfast_quantity.get())*20
93
94     if homestay == 'Only homestay':
95         price= homestay
96     elif breakfast == 'Add breakfast':
97         add= homestay + breakfast
98         price=add
99     else :
100
101     #Offer
102     if homestay+ breakfast > 250:
103         all_total= (homestay+ breakfast) * 80/100 # 20% discount for price more than 250
104     else:
105         all_total= (homestay + breakfast)
106
107     print('RM', all_total)

```

```

108     empty_label.config(text= f"Your Total: RM {all_total}")
109
110 # To insert your Data to your database, As for this example, you have 3 attributes. (2 Attributes from your selection (Package, Pack) and ano
111 sql = "INSERT INTO customer_information (Title_Label,Name_label,Phone_Label,Date_label,Out_label,Homestay_quantity,Breakfast_quantity>Total)
112 val = (title_combobox.get(),name_entry.get(),phone_entry.get(),cal1.get(),cal2.get(),homestay_quantity.get(),breakfast_quantity.get(),all_tot
113 mycursor.execute(sql, val)
114 mydb.commit()
115
116 button_submit=tkinter.Button(user_info_frame,text= 'Submit',command=total)
117 button_submit.grid(row=11,column=0,padx=10,pady=10)
118
119 empty_label=tkinter.Label(user_info_frame)
120 empty_label.grid(row=11,column=1)
121
122 # Prices List by using textbox
123 prices_text = tkinter.Text(user_info_frame, height=8, width=20,bg="DarkSalmon")
124 prices_text.grid(row=1,column= 0)

```

and another attributes that derived from your attributes (price))

```

Total) VALUES (%s, %s, %s,%s,%s,%s,%s,%s,%s)"
all_total)

```

```

125
126 # The defined list by using pricebox
127 prices_text.insert(tkinter.END, "Homestay Prices\n\n")
128 prices_text.insert(tkinter.END, " 1 Homestay \nPrice: RM155\n\n")
129 prices_text.insert(tkinter.END, " Add your breakfast \nPrice: RM20\n\n")
130 prices_text.configure(state='disabled')
131
132 window.mainloop()

```



#### 4.0 GUI (Graphical User Interface)

Customer Information

Homestay Prices

1 Homestay  
Price: RM155

Add your breakfast  
Price: RM20

Title

Mr.

Name

Saifuddin Rahman

Phone Number

01177610864

2/7/24

2/8/24

Date Check-In

Date Check-Out

2/7/24

2/8/24

Homestay

Breakfast

2

14

Submit

Your Total: RM 472.0

## 5.0 Database

Server: 127.0.0.1 » Database: homestay\_booking » Table: customer\_information

Browser Structure SQL Search Insert Export Import Privileges Operations Tracking More

Table structure Relation view

| #                        | Name                 | Type         | Collation          | Attributes | Null | Default | Comments | Extra | Action             |
|--------------------------|----------------------|--------------|--------------------|------------|------|---------|----------|-------|--------------------|
| <input type="checkbox"/> | 1 Title_Label        | varchar(4)   | utf8mb4_general_ci |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 2 Name_label         | varchar(100) | utf8mb4_general_ci |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 3 Phone_Label        | varchar(11)  | utf8mb4_general_ci |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 4 Date_label         | varchar(10)  | utf8mb4_general_ci |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 5 Out_label          | varchar(10)  | utf8mb4_general_ci |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 6 Homestay_quantity  | int(1)       |                    |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 7 Breakfast_quantity | int(2)       |                    |            | No   | None    |          |       | Change  Drop  More |
| <input type="checkbox"/> | 8 Total              | float        |                    |            | No   | None    |          |       | Change  Drop  More |

☐ Check all With selected: Browse Change Drop Primary Unique Index Spatial Fulltext

Add to central columns Remove from central columns

Server: 127.0.0.1 » Database: homestay\_booking » Table: customer\_information

Browser Structure SQL Search Insert Export Import Privileges Operations Tracking More

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available. ⓘ

✓ Showing rows 0 - 3 (4 total, Query took 0.0008 seconds.) [Title\_Label: MISS... - MRS....]

```
SELECT * FROM `customer_information` ORDER BY `Title_Label` ASC
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

| Title_Label | Name_label       | Phone_Label | Date_label | Out_label | Homestay_quantity | Breakfast_quantity | Total |
|-------------|------------------|-------------|------------|-----------|-------------------|--------------------|-------|
| Miss        | Felicia Landosi  | 01488762340 | 1/24/24    | 1/25/24   | 1                 | 0                  | 155   |
| Mr.         | Jeong Jaehyun    | 01139136756 | 1/12/24    | 1/14/24   | 1                 | 9                  | 268   |
| Mr.         | Saifuddin Rahman | 01177610864 | 2/7/24     | 2/8/24    | 2                 | 14                 | 472   |
| Mrs.        | Sairah Sakinah   | 01278923456 | 1/29/24    | 1/31/24   | 1                 | 2                  | 195   |

☐ Show all | Number of rows: 25 | Filter rows: Search this table

## **6.0 Conclusion**

Overall, the process and its purpose are evident in this report. We can see from the creation of the homestay booking GUI that it needs to be completely functioning and that the record that the user specifies is present in your data. Ultimately, GUI can assist me in improving information and technology-related matters through their approach.