UNIVERSITI TEKNOLOGI MARA

MERBOK, KEDAH

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

DIPLOMA IN LIBRARY INFORMATICS

CDIM144

PROGRAMMING FOR LIBRARIES

IML208

INDIVIDUAL ASSIGNMENT : HOUSE RENTAL REGISTRATION

PREPARED BY

NURUL SYAFIQAH BINTI MAHAYUDDIN (2022863286)

KCDIM1443B

PREPARED FOR

AIRUL SHAZWAN BIN NORSHAHIMI

SUBMISSION DATE

4 JANUARY 2024

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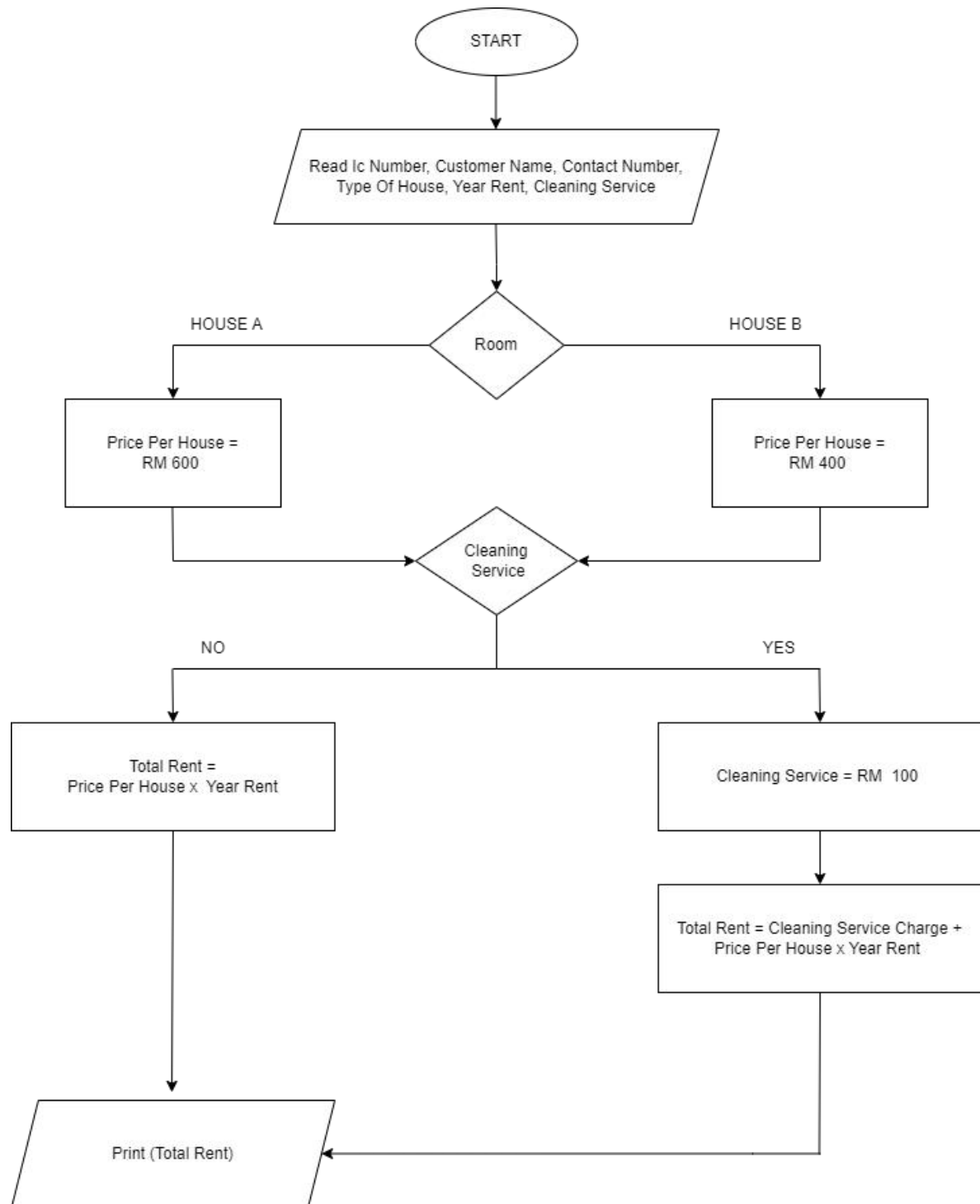
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1.0 INTRODUCTION

A rental house is something that always sought and needed by anyone, whether single person or married person. There are a lot of rental house offers nowadays, so to be a brilliant renter we need to consider some things to ensure we will comfortable with the house and suitable with the budget that we have to rent a house.

I create one system that helps easier those who wants to register the rental house and make sure customer can consider with their own budget. This system called "House Rental Registration" that can manage the registration for those who wants to rent under their chosen house rental agency. This system works in a way that the customer can make a choice by comparing the houses that offered by the agency and consider an advantages given for each house. Other than that, they can also compare the price of each house and make the best decision based on their budget.

Furthermore, after decide what types of house they want to choose they can continue with the registration which is fill in the details about the renter identity such as name, contact number and Identity card number (IC). They also can make early plan in renting house. For instance, the customer wants to rent the house for 5 years, so customer will know how much they need to pay for the rent for five years. The customer can make a planning on how to pay the rent without delaying the rental payment each year. In addition, customer registration also helps the rental agency to locate and get to know who is the person that rent their house. If something bad happen, they can directly contact the renter. It means the data of the renter will be saved for future used.

2.0 FLOWCHART FOR HOUSE RENTAL REGISTRATION

START

Read Ic Number, Customer Name, Contact Number,
Type Of House, Year Rent, Cleaning Service

Room

HOUSE A

HOUSE B

Price Per House =
RM 600

Price Per House =
RM 400

Cleaning
Service

NO

YES

Total Rent =
Price Per House x Year Rent

Cleaning Service = RM 100

Total Rent = Cleaning Service Charge +
Price Per House x Year Rent

Print (Total Rent)

3.0 CODE FOR HOUSE RENTAL REGISTRATION

```python
import tkinter as tk
from tkinter import ttk
import mysql.connector

# CONNECT TO MYSQL DATABASE
mydb = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="house_rental"
)
```

```python
# CREATE A CURSOR OBJECT TO EXECUTE SQL QUERIES
mycursor = mydb.cursor()
```

```python
def collect_data():
    Ic_Number = Ic_number_entry.get()
    Customer_Name = Customer_name_entry.get()
    Contact_Number = Contact_number_entry.get()
    Type_Of_House = Type_of_house_combobox.get()
    Year_Rent = int(Year_rent_entry.get())
    Cleaning_Service = (Cleaning_service_combobox.get())
```

```python
    # DEFINE VALUES FROM SELECTIONS
    Price_Per_House ={
        "HOUSE A" : 600,
        "HOUSE B" : 400,
    }
```

```python
    # CALCULATE TOTAL RENT
        "NO": 0,
    }
```

```python
    if Cleaning_Service == "YES":
        Total_Rent = Cleaning_Service_Charge[Cleaning_Service] +
Price_Per_House[Type_Of_House] * int(Year_Rent)
        print(Total_Rent)
```

```python
    else :
        Total_Rent = Price_Per_House[Type_Of_House] * int(Year_Rent)
        print(Total_Rent)
```

```python
    # TO INSERT DATA TO DATABASE
    sql = "INSERT INTO house_rental_registration (Ic_Number,
Customer_Name, Contact_Number, Type_Of_House,
Year_Rent,Cleaning_Service, Total_Rent) VALUES
(%s, %s, %s,%s,%s,%s,%s)"
    val = (Ic_Number, Customer_Name, Contact_Number, Type_Of_House,
Year_Rent, Cleaning_Service, Total_Rent)
    mycursor.execute(sql, val)
    mydb.commit()
```

```python
    # FUNCTION COLLECT DATA
    output_label.configure(text=f"Ic Number: {Ic_Number},Contact Number:
{Contact_Number},Type Of House: {Type_Of_House},Year
Rent:{Year_Rent},Cleaning Service Payment: {Cleaning_Service},Total
Rent:RM{Total_Rent}")
```

```python
# INTERFACE
root = tk.Tk()
root.title("house_rental")
root.geometry('600x800')
root.configure(bg="GoldenRod4")
```

```python
frame = tk.Frame(root)
frame.pack()
```

```python
# PAGE TITLE
label = tk.Label(root, text="HOUSE RENTAL REGISTRATION",
font=("Franklin Gothic Medium", 16,
"bold"),bg="LightGoldenrod3",fg="floralwhite",bd=5,relief="ridge")
label.pack(ipadx=12, ipady=10)
```

```python
#  HOUSE SPECIFICATION LIST BY USING TEXTBOX
house_specification = tk.Text(root, height=10, width=60, bg="Khaki2",
bd=7)
house_specification.pack(pady=15)
```

```python
# DEFINE LIST BY USING HOUSE SPECIFICATION BOX
house_specification.insert(tk.END, "House Specification and Price\n\n")
house_specification.insert(tk.END, "House A: Corner lot house, three
bedroom \nAdd cleaning service: Rm100 \nPrice: RM 600\n\n")
house_specification.insert(tk.END, "House B: Middle house, two bedroom
\nAdd Cleaning service: RM100 \nPrice: RM 400\n\n")
house_specification.configure(state='disable')
```

```python
frame = tk.Frame(root)
frame.pack()
```

```python
# SAVING CUSTOMER REGISTRATION USING
Customer_Registration_frame=tk.LabelFrame(frame, text="Customer
Registration",font=("aldhabi",10,"bold"),bg="Goldenrod",fg="FloralWhite
")
Customer_Registration_frame.grid(row=7, column=0)
```

```python
Ic_number_label=tk.Label(Customer_Registration_frame, text="Ic
Number",bg="Khaki1",bd=3,relief="sunken")
Ic_number_label.grid(row=7,column=0)
Ic_number_entry=tk.Entry(Customer_Registration_frame,bd=3,relief="ridge
")
Ic_number_entry.grid(row=8, column=0)
```

```python
Customer_name_label=tk.Label(Customer_Registration_frame,
text="Customer Name",bg="Khaki1",bd=3,relief="sunken")
Customer_name_label.grid(row=7, column=3)
Customer_name_entry=tk.Entry(Customer_Registration_frame,bd=3,relief="r
idge")
Customer_name_entry.grid(row=8, column=3)
```

```python
Contact_number_label=tk.Label(Customer_Registration_frame,
text="Contact Number",bg="Khaki1",bd=3,relief="sunken")
Contact_number_label.grid(row=7, column=6)
Contact_number_entry=tk.Entry(Customer_Registration_frame,bd=3,relief="
ridge")
Contact_number_entry.grid(row=8, column=6)
```

```python
Type_of_house_label=tk.Label(Customer_Registration_frame, text="Type Of
House",bg="Khaki1",bd=3,relief="sunken")
Type_of_house_combobox=ttk.Combobox(Customer_Registration_frame,
values=["HOUSE A", "HOUSE B"])
Type_of_house_label.grid(row=12, column=0)
```

```python
Type_of_house_combobox.grid(row=13, column=0)
```

```python
Year_rent_label=tk.Label(Customer_Registration_frame, text="Year
Rent",bg="Khaki1",bd=3,relief="sunken")
Year_rent_label.grid(row=12, column=3)
Year_rent_entry=tk.Entry(Customer_Registration_frame,bd=3,relief="ridge
")
Year_rent_entry.grid(row=13, column=3)
```

```python
Cleaning_service_label=tk.Label(Customer_Registration_frame,
text="Cleaning Service",bg="Khaki1",bd=3,relief="sunken")
Cleaning_service_combobox=ttk.Combobox(Customer_Registration_frame,
values=["YES","NO"])
Cleaning_service_label.grid(row=12, column=6)
Cleaning_service_combobox.grid(row=13, column=6)
```

```python
for widget in Customer_Registration_frame.winfo_children():
    widget.grid_configure(padx=15, pady=10)
```

```python
# CALCULATE AND SAVE BUTTON
calculate_button = tk.Button(root, text="CALCULATE",
command=collect_data,bg="DarkGoldenrod",bd=5,relief="raised")
calculate_button.pack(pady=15)
```

```python
label = tk.Label(root, text='TOTAL RENT :', font=("Segoe
Print",15,"underline","bold"))
label.pack(ipadx=10, ipady=10)
output_label = tk.Label(root, text="")
output_label.pack()
```

```python
root.mainloop()
```

4.0 GUI FOR HOUSE RENTAL

5.0 DATABASE FOR GUI HOUSE RENTAL

5.1 STRUCTURE

5.2 BROWSE

6.0 CONCLUSION

        In conclusion, the system that I create are tested and functioning well. It will be more easier for a person or family want to rent a house using this system because this system can helps the renter to be the brilliant renter and thinking about the future too. This system also helps the renter agency itself to get to know the identity of their house renter and get ready in future if something bad happen to the customer.