**UNIVERSITI TEKNOLOGI MARA**

**KEDAH BRANCH**

**SCHOOL OF INFORMATION SCIENCE**

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS**

**DIPLOMA IN INFORMATICS LIBRARY (IM144)**

**IML208 : PROGRAMMING FOR LIBRARIES**

# INDIVIDUAL PROJECT: DATA ENTRY FOR MYSQL DATABASE

CAT DAYCARE CENTRE


***Prepared by:***

NUR MAISARAH BINTI ABDUL MANAH (2022892948)

GROUP KCDIM1443F


***Prepared for:***

SIR AIRUL SHAZWAN BIN NORSHAHIMI

***Submission date:***

**04.01.2024**

# INDIVIDUAL PROJECT: DATA ENTRY FOR MYSQL DATABASE

CAT DAYCARE CENTRE


**PREPARED BY:**

NUR MAISARAH BINTI ABDUL MANAH (2022892948)

GROUP KCDIM1443F



**IM144 – DIPLOMA IN INFORMATICS LIBRARY**

**SCHOOL OF INFORMATION SCIENCE**

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS**

**UNIVESITI TEKNOLOGI MARA (UITM)**

**KEDAH BRANCH**

**ACKNOWLEDGMENT**

I want to take this opportunity to express my gratitude to those who have supported and inspired me throughout the completion of this assignment.

First and foremost, I would like to thank Sir Airul Shazwan Bin Norshahimi

for his guidance, expertise, and continuing support, your help has been instrumental in shaping this work.

I am also indebted to my classmates and friends who offered encouragement and engaged in valuable discussions on the subject matter. Your input has greatly contributed to the depth and quality of this assignment.

Furthermore, I want to express my heartfelt thanks to my family for their unwavering encouragement and understanding during the countless hours spent on this project-/Finally, I want to extend my appreciation to Allah SAW for giving me the necessary motivation and strength to complete this assignment.

This assignment would not have been completed without the collective support and encouragement from the aforementioned individuals. Thank you for being a part of this journey.

## TABLE OF CONTENTS

## 1.0 INTRODUCTION

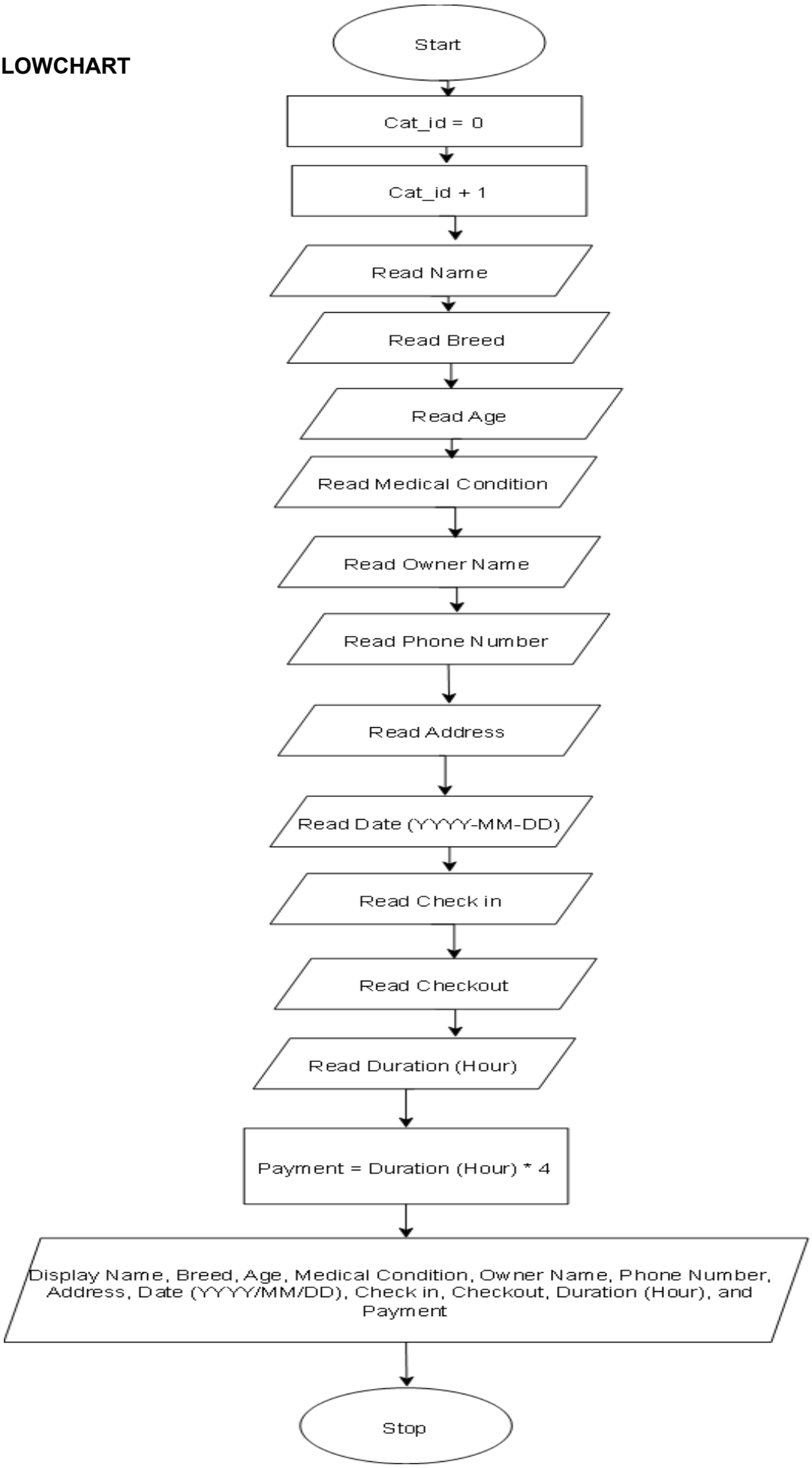
Welcome to the purrfect world of our Cat Daycare Database, where feline enthusiasts and their delightful companions find a seamless haven for their daycare needs. This comprehensive database serves as the digital heartbeat of our feline-centric haven, meticulously storing essential information about each cat, their devoted owners, and the crucial reservation details.

In the bustling realm of modern pet care, the demand for organized and efficient management has become increasingly evident. Our Cat Daycare Database addresses this need with precision and care, streamlining the process of keeping track of the diverse personalities and requirements of our furry guests. Through the integration of advanced technology, this database ensures a smooth and enjoyable experience for both the cats and their loving owners.

The necessity for such a database arises from the complexities of managing a dynamic cat daycare environment. From name and health records, our database ensures that every detail is securely recorded and easily accessible. By storing information about the owners, we facilitate seamless communication, creating a bond of trust between the daycare staff and the caregivers. Moreover, the reservation time details are diligently documented to ensure a structured and organized daily routine, providing cats with the consistency they thrive on.

In essence, our Cat Daycare Database isn't just a repository of data; it's the heartbeat of our commitment to exceptional feline care. As we navigate the intricate world of cat daycare, this database is a testament to our dedication to creating a comfortable, safe, and loving environment for our four-legged friends and their human companions. Welcome to a world where every meow matters and every detail is lovingly preserved in our feline haven's digital embrace.

## 2.0 FLOWCHART



## 3.0 PYTHON CODE

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

class CatGenerator:
    def __init__(self):
        self.cat_id = 0

    def generate_running_number(self):
        self.cat_id += 1
        return self.cat_id

    def insert_running_number(self, cat_name, cat_breed, cat_age, cat_medcon, date, check_in, check_out, duration_hour, owner_name, phone_num,
    address, payment):
        cat_id = self.generate_running_number()

        sql = 'INSERT INTO cat(CAT_ID, CAT_NAME, CAT_BREED, CAT_AGE, CAT_MEDCON, DATE, CHECK_IN, CHECK_OUT, DURATION_HOUR, OWNER_NAME,
        PHONE_NUM, ADDRESS, PAYMENT) VALUES (%s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s, %s)'

        val = (cat_id, cat_name, cat_breed, cat_age, cat_medcon, date, check_in, check_out, duration_hour, owner_name, phone_num, address,
        payment)

        try:
            cursor.execute(sql, val)
            mydb.commit()
            print('Data saved successfully.')
        except Exception as e:
            print(f'Error saving data: {e}')
```

*Figure 3.1 Python code for generating running number and connecting python code to mysql database*

```python
# Connect to your MySQL database
mydb = mysql.connector.connect(
    host='localhost',
    user='root',
    password='',
    database='cat_daycare_centre'
)

# Create a cursor object to execute SQL queries
cursor = mydb.cursor()
```

*Figure 3.2 Connecting python code to mysql database*

```python
def perform_calculation():
    try:
        # Get the value from the Entry widget and convert it to a float
        hour = float(duration_hour_entry.get())

        # Perform a calculation
        payment = hour * 4

        # Update the result_label with the calculated result
        payment_label.config(text=f'Payment: RM {payment}')

    except ValueError:
        #Handle the case where the input is not a valid float
        payment_label.config(text='Invalid input. Please enter a number.')
```

*Figure 3.3 Python code for performing calculation(payment)*

```python
#GUI code

#cat's name
cat_name_label = tkinter.Label(cat_info_frame, text = 'Name: ')
cat_name_label.grid(row = 0, column = 0, padx=10, pady=10)
cat_name_entry = tkinter.Entry(cat_info_frame)
cat_name_entry.grid(row = 0, column = 1, padx=10, pady=10)


#cat's breed
cat_breed_label = tkinter.Label(cat_info_frame, text = 'Breed: ')
cat_breed_label.grid(row = 0, column = 2, padx=10, pady=10)
cat_breed_entry = tkinter.Entry(cat_info_frame)
cat_breed_combobox = ttk.Combobox(cat_info_frame, values =['','Siamese', 'British Shorthair', 'Maine Coon', 'Persian', 'Ragdoll', 'Sphynx',
'American Shorthair', 'Abyssinian', 'Exotic Shorthair', 'Scottish Fold', 'Burmese', 'Birman', 'Bombay', 'Devon Rex', 'Balinese', 'Javanese',
'Oriental Shorthair', 'Munchkin'])
cat_breed_combobox.grid(row = 0, column = 3, padx=10, pady=10)

#cat's age
cat_age_label = tkinter.Label(cat_info_frame, text = 'Age: ')
cat_age_label.grid(row = 0, column = 4, padx=10, pady=10)
cat_age_spinbox = tkinter.Spinbox(cat_info_frame, from_= 1, to = 20)
cat_age_spinbox.grid(row = 0, column = 5, padx=10, pady=10)

#cat's medical condition
cat_medical_condition_label = tkinter.Label(cat_info_frame, text = 'Medical condition: ')
cat_medical_condition_label.grid(row = 1, column = 0, padx=10, pady=10)
cat_medical_condition_combobox = ttk.Combobox(cat_info_frame, values = ['', 'None'])
cat_medical_condition_combobox.grid(row = 1, column = 1, padx=10, pady=10)
```

*Figure 3.4 Examples of python code for attributes*

```python

button = ttk.Button(cat_info_frame, text='Save data', command=save_data)
button.grid(row=6, column=5, padx=10, pady=10)


root.mainloop()

```

*Figure 3.5 Save button*

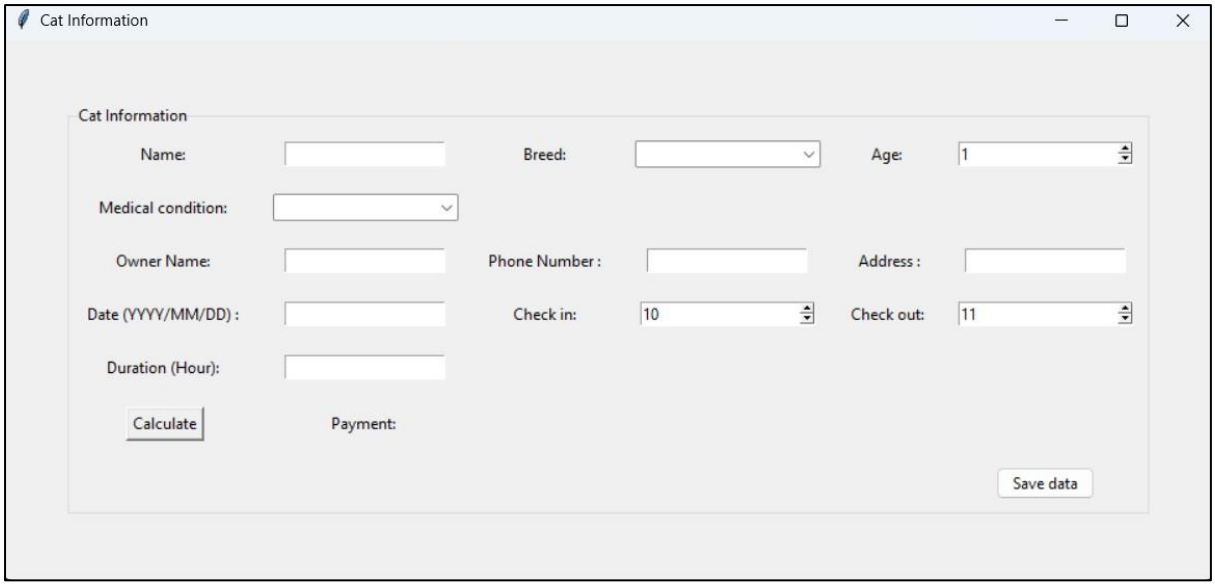



*Figure 3.6 GUI interface for data entry*

## 4.0 MYSQL DATABASE

The database is called ‘cat_daycare_centre’. It contains 1 table named ‘cat’ with 13 key attributes pertaining to the data related to cat daycare service.

The attributes in the table are CAT_ID, CAT_NAME, CAT_BREED, CAT_AGE, CAT_MEDCON, DATE, CHECK IN, CHECK OUT, DURATION_HOUR, OWNER_NAME, PHONE_NUM, ADDRESS, and PAYMENT.


*Figure 4.1 Table in cat_daycare_centre database*

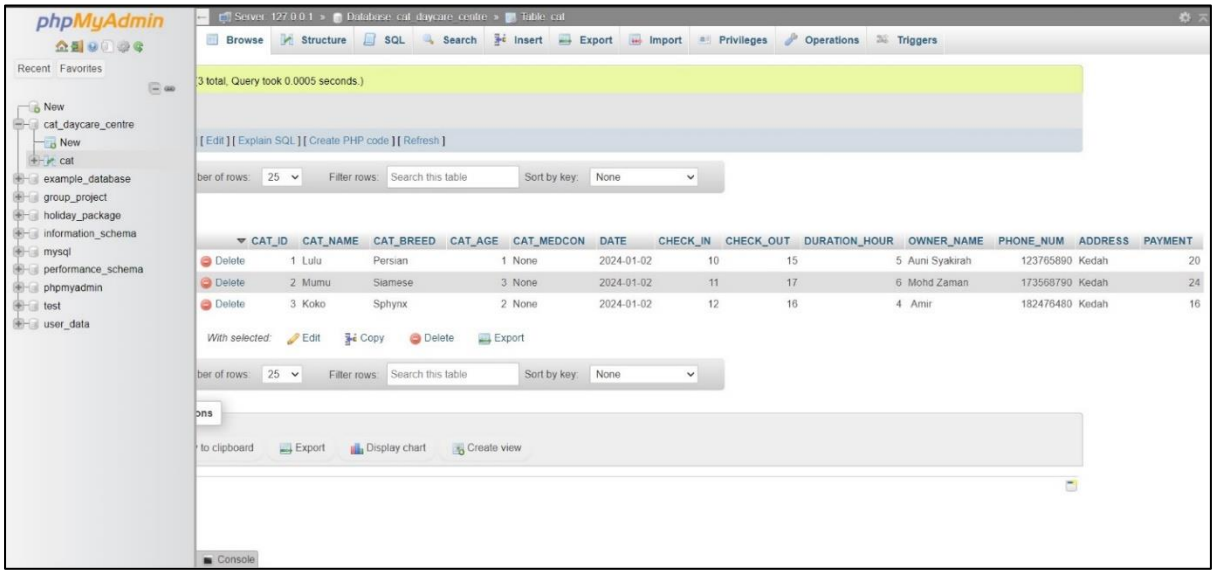



*Figure 4.2 Examples of stored data in cat_daycare_centre database*

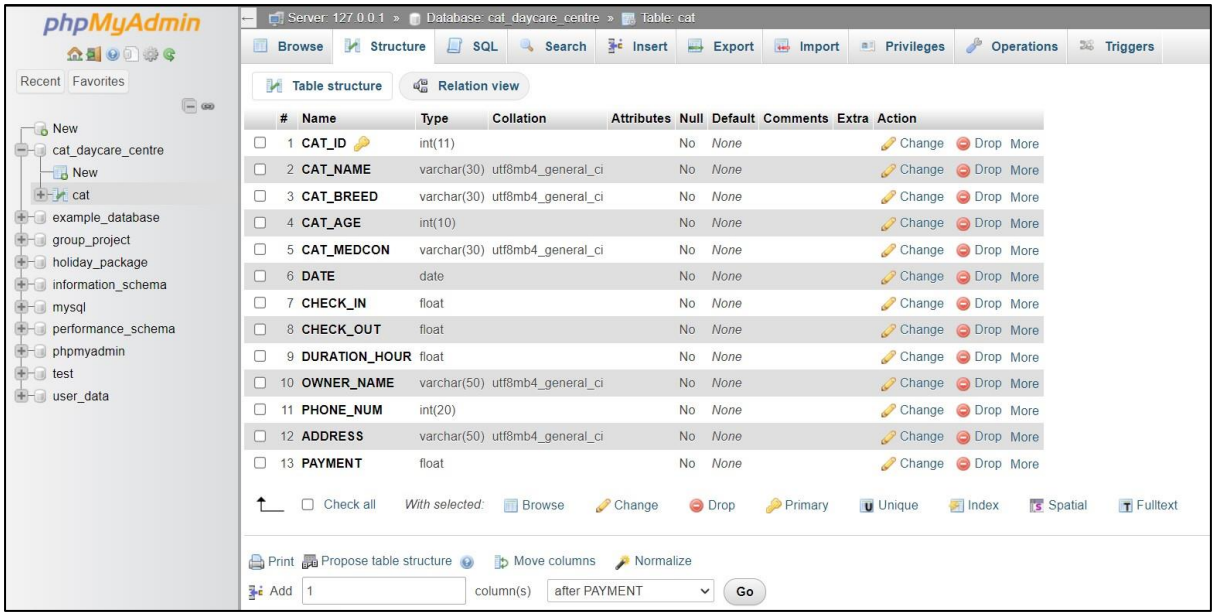



*Figure 4.3 Sructure*