



DIPLOMA IN LIBRARY INFORMATICS

**UNIVERSITI TEKNOLOGI MARA (UITM) KEDAH, CAMPUS SUNGAI PETANI
FACULTY OF INFORMATION SCIENCE STUDIES COLLEGE OF COMPUTING,
INFORMATICS AND MATHEMATICS**

IML208 PROGRAMMING FOR LIBRARIES

INDIVIDUAL ASSIGNMENT

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SUBMISSION DATE:

4th JANUARY 2024

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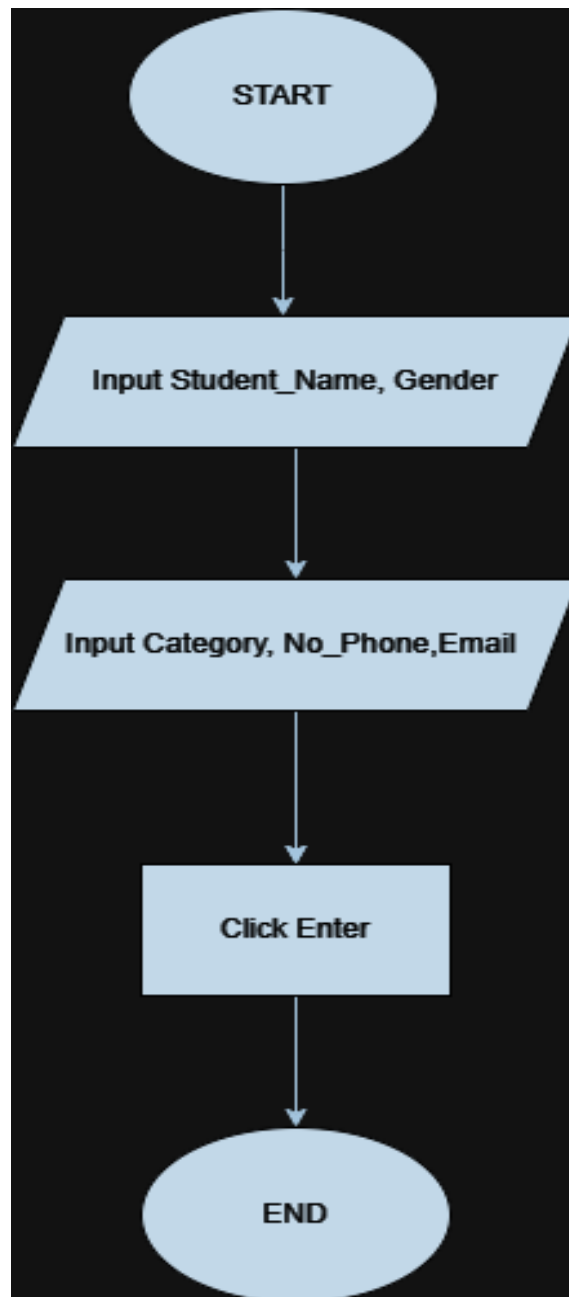
1.0 INTRODUCTION

The Piano Class Registration Form is the user-friendly application is intended to make the registration process for piano lessons easier. This programme, which is powered by Python's Tkinter library, provides a graphical interface through which students can easily enter their information. The form asks for information like the student's name, gender, category, phone number, and email address. Students can select their gender and category from a dropdown menu, such as Primary School or Secondary School.

Students must accept the terms and conditions to ensure a smooth registration process. Once the required information has been entered, students can submit their registration by clicking the "Enter" button. If the terms and conditions are accepted, the student's name will be saved in the database. Otherwise, the student's name, gender, category, phone number, and email address will be saved by the programme.

The programme uses the credentials provided in the code to connect to a MySQL database and store the data. The information is then stored in the "student_data" table. Students will see an output label confirming that all students are welcome to join the piano classes after successfully registering.

2.0 FLOWCHART



3.0 SNAPSHOT OF CODE

```
1  import tkinter as tk
2  from tkinter import ttk
3  import mysql.connector
4
5  def enter_data():
6
7      # Student info
8      student_name = student_name_entry.get()
9      gender = gender_type_combobox.get()
10     category = category_type_combobox.get()
11     no_phone = int(no_phone_entry.get())
12     email = email_entry.get()
13
14     # Connect to MySQL
15     mydb = mysql.connector.connect(
16         host="localhost",
17         user="root",
18         password="",
19         database="piano_class_registration"
20     )
21
22     mycursor = mydb.cursor()
23
24     # Inserting data into a table
25     sql = "INSERT INTO student_data (Student_Name, Gender, Category, No_Phone, Email) VALUES (%s, %s, %s, %s, %s)"
26     val = (student_name, gender, category, no_phone, email)
27     mycursor.execute(sql, val)
28     mydb.commit()
29
```

```
30 # Your Main window, You need to have the title, geometry (MUST)
31 root = tk.Tk()
32 root.title("Piano Class Registration Form")
33 root.geometry('700x500')
34
35 # Page title
36 label = tk.Label(root, text="Piano Class Registration", font=("Roman", 28, "bold"), bg='#FA8072')
37 label.grid(ipadx=10, ipady=10)
38
39 frame = tk.Frame(root)
40 frame.grid()
41
42 # Student Info Frame
43 student_info_frame = tk.LabelFrame(frame, text="Student Information", bg='#FFA07A')
44 student_info_frame.grid(row=1, column=0, padx=30, pady=50)
45
46 # Student Name
47 student_name_label = tk.Label(student_info_frame, text="Student Name")
48 student_name_label.grid(row=0, column=0)
49 student_name_entry = tk.Entry(student_info_frame)
50 student_name_entry.grid(row=1, column=0)
51
52 # Gender
53 gender_type_label = tk.Label(student_info_frame, text="Gender")
54 gender_type_combobox = ttk.Combobox(student_info_frame, values=["", "Male", "Female"])
55 gender_type_label.grid(row=0, column=1)
56 gender_type_combobox.grid(row=1, column=1)
57
58 # Category
```

```

59 category_type_label = tk.Label(student_info_frame, text="Category")
60 category_type_combobox = ttk.Combobox(student_info_frame, values=["Primary School", "Secondary School"])
61 category_type_label.grid(row=2, column=0)
62 category_type_combobox.grid(row=3, column=0)
63
64 # No Phone
65 no_phone_label = tk.Label(student_info_frame, text="No Phone")
66 no_phone_label.grid(row=2, column=1)
67 no_phone_entry = tk.Entry(student_info_frame)
68 no_phone_entry.grid(row=3, column=1)
69
70 # Email
71 email_label = tk.Label(student_info_frame, text="Email")
72 email_label.grid(row=3, column=2)
73 email_entry = tk.Entry(student_info_frame)
74 email_entry.grid(row=3, column=3)
75
76 for widget in student_info_frame.winfo_children():
77     widget.grid_configure(padx=10, pady=5)
78

```

```

79 # Save Button
80 save_button = tk.Button(root, text="Enter", command=enter_data)
81 save_button.grid(pady=10)
82
83 # Output Label & result
84 label = tk.Label(root, text='Thank You For Your Registration!', font=("Times New Romans", 17))
85 label.grid(ipadx=10, ipady=10)
86 output_label = tk.Label(root, text="")
87 output_label.grid()
88
89 root.mainloop()

```


4.0 SNAPSHOT OF GUI



5.0 SNAPSHOT OF DATABASE

The screenshot shows the phpMyAdmin interface. On the left is a sidebar with a tree view of databases and tables. The main area displays the 'student_data' table. A warning message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green bar indicates 'Showing rows 0 - 4 (5 total, Query took 0.0007 seconds.)'. The SQL query 'SELECT * FROM `student_data`' is shown. Below the query are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. There are also controls for 'Show all', 'Number of rows' (set to 25), and 'Filter rows' (Search this table). The table data is displayed below the 'Extra options' button. At the bottom, there is a 'Query results operations' button and a 'Console' tab.

student_name	gender	category	no_phone	email
sha	Female	Secondary School	2147483647	sha@gmail.com
nurin	Female	Primary School	2147483647	yeen@gmail.com
wasi	Female	Primary School	1529884125	wasilatul@gmail.com
ali	Male	Secondary School	199884158	ali@gmail.com
zulkarnain	Male	Secondary School	153309822	zulcute@gmail.com