



**SCHOOL OF INFORMATION SCIENCE COLLEGE OF COMPUTING, INFORMATICS AND
MEDIA UNIVERSITI TEKNOLOGI MARA MERBOK KEDAH**

**DIPLOMA IN LIBRARY INFORMATIC
(CDIM 144)**

**PROGRAMMING FOR LIBRARIES
(IML 208)**

GROUP ASSIGNMENT: KINDERGARTEN SYSTEM

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We would also want to say thank you to our lovely parents and all the other family members who give us support to finish this assignment.

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1.0 INTRODUCTION

The project that we chose is kindergarten. Our group are focused on streamlining and enhancing key processes within the kindergarten environment through the subject of programming for libraries. Recognizing the challenges faced in the current system, our group has identified three critical areas for improvement which are the complex registration process, the difficulty teachers encounter in calculating their net salary, and the need for a more efficient method of informing students about available kindergarten subjects.

In this project, our primary objectives are threefold. Firstly, we aim to develop a systematic and accessible registration process that ensures efficiency and inclusivity. Secondly, we strive to simplify the process for teachers to calculate their net salary from the gross amount received. Lastly, we endeavor to provide students with a user-friendly platform to explore and register for available kindergarten subjects.

To achieve these goals, our group will employ a comprehensive approach, integrating coding, flowchart creation, and database implementation. The coding aspect will involve developing solutions for teacher registration, student registration, and subject registration, while flowcharts will visually represent the logical processes involved. The database implementation will contribute to the seamless management of information and data associated with these crucial aspects of kindergarten administration. Throughout this project, we have learned to create a more seamless and user-friendly experience for teachers, students, and administrators.

2.0 PROBLEM STATEMENT

1. Difficult registration process.

The current student registration process is difficult to use and insert the insert the information accurately. There also lack of validation check during registration, leading to potential error and incomplete submissions.

2. The teacher having difficulty in knowing their net salary.

There is no function in the system that makes it easy for teachers to view and calculate their net salary. It might be difficult for teachers to get clear and simple information about their total net income, bonuses, and deductions.

3. To be inform about the kindergarten subject availability to the student.

There is no system in place to notify students about the subjects that are taught in the kindergarten. Students are not provided with details on the subjects offered, making it challenging for them to plan their courses effectively.

3.0 OBJECTIVES

1. Systematic and Accessible Registration Process

Enhance the registration process to be systematic, user-friendly, and accessible for all stakeholders involved.

2. Teacher Net Salary Calculation

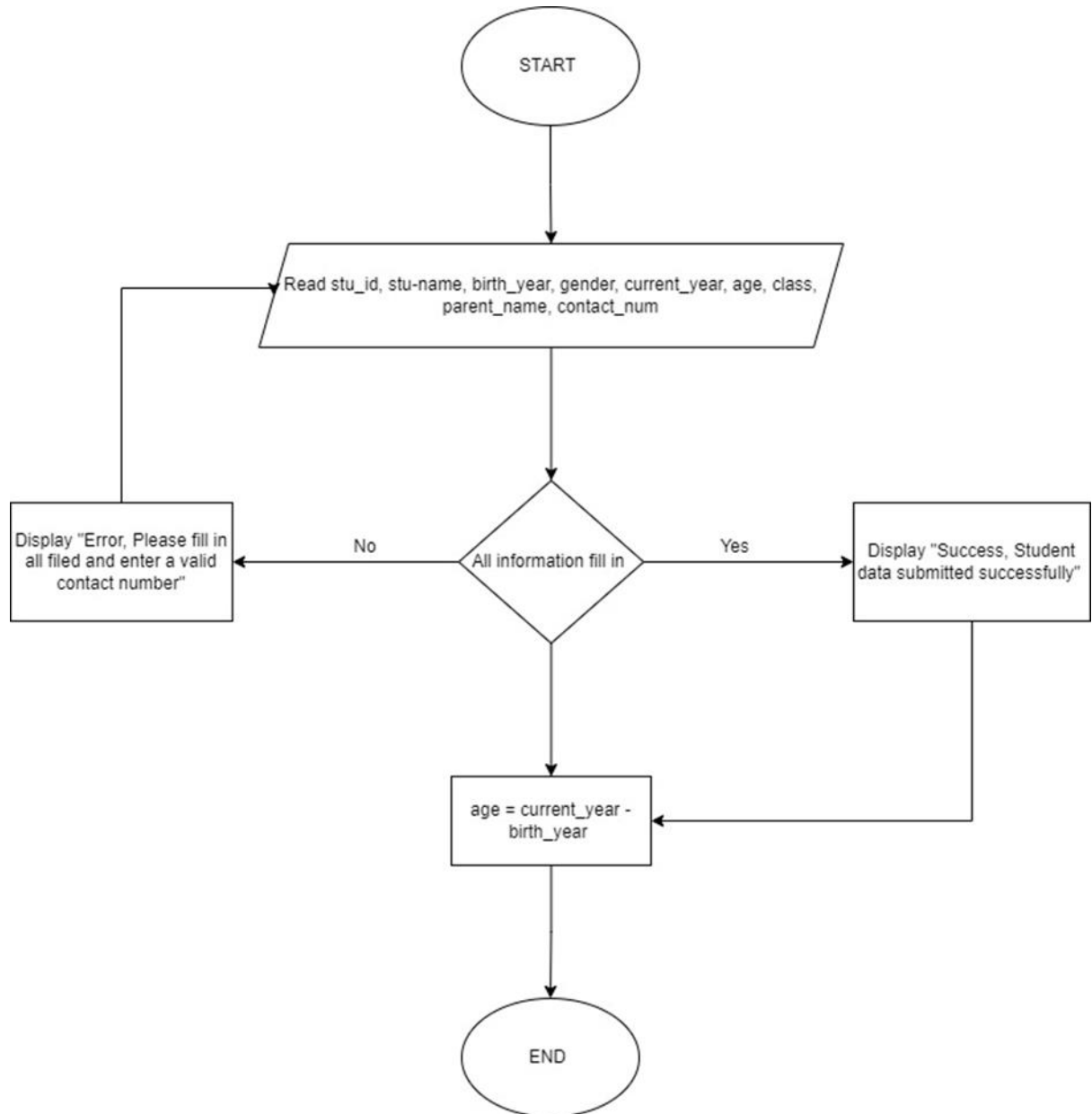
Simplify the process for teachers to calculate their net salary accurately based on their gross salary.

3. Subject Registration Option for Students

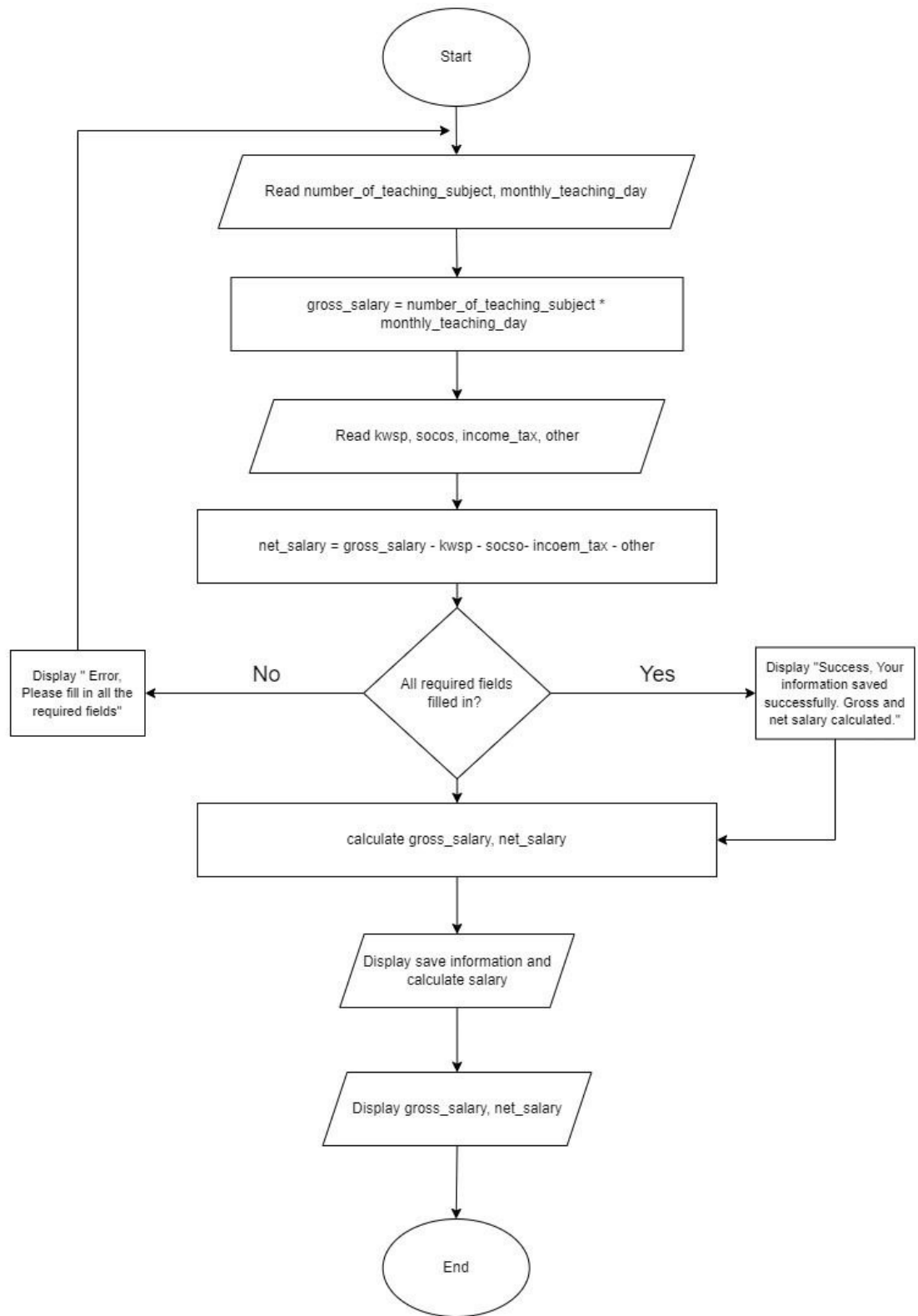
Empower students with the ability to register for available subjects in kindergarten.

4.0 FLOWCHART

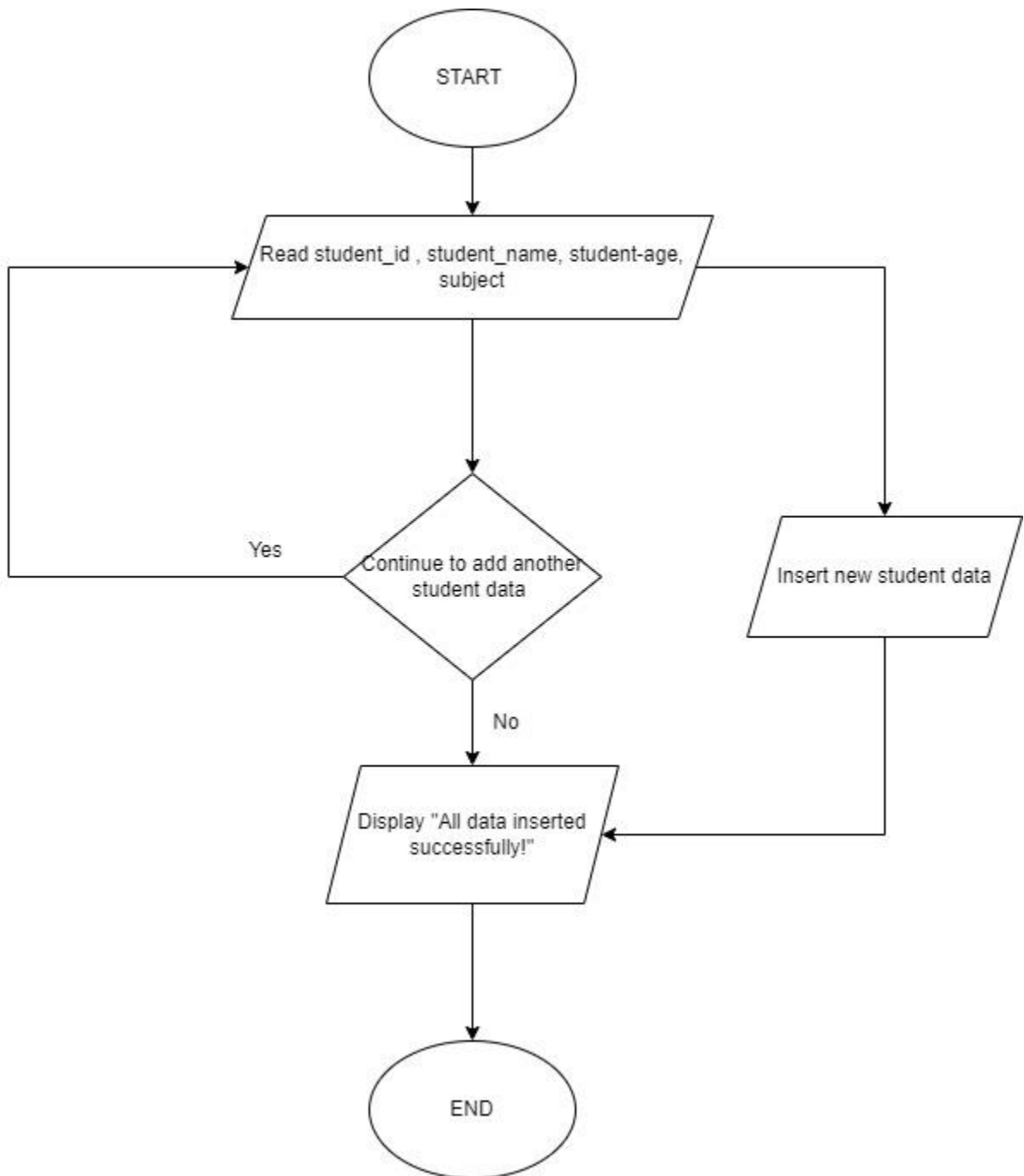
4.1 Student Registration



4.2 Teacher Calculation



4.3 Subject Registration



5.0 SHAPSHOT OF CODING

5.1 Student Registration

```
1 import tkinter as tk
2 from tkinter import ttk
3 from tkinter import messagebox
4 import mysql.connector
5
6 # To connect with the sql database
7 mydb = mysql.connector.connect(
8     host="localhost",
9     user="root",
10    password="",
11    database="kindergarten_system"
12 )
13
14 # Create a cursor object to execute SQL queries
15 mycursor = mydb.cursor()
16
17 # To store the student information
18 students_data = []
19
20 # Function to calculate the age by using the birth year and current year
21 def calculate_age(*args):
22     try:
23         birth_year = int(birth_year_combobox.get())
24         current_year = int(entry_current_year.get())
25         age = current_year - birth_year
26         entry_age.config(state='normal')
27         entry_age.delete(0, tk.END)
28         entry_age.insert(0, str(age))
29         entry_age.config(state='readonly')
30     except ValueError:
31         entry_age.config(state='normal')
32         entry_age.delete(0, tk.END)
33         entry_age.config(state='readonly')
34
35 # Function to handle the database
36 def submit_registration():
37     try:
38         stu_id = int(entry_stu_id.get())
39         stu_name = entry_stu_name.get()
40         birth_year = int(birth_year_combobox.get())
41         gender = gender_combobox.get()
42         current_year = int(entry_current_year.get())
43         age = current_year - birth_year
44         class_name = class_name_combobox.get()
45         parents_name = entry_parent_name.get()
46         contact_num = entry_contact_num.get()
47
```

```

48 # To insert the data into the database with 9 attributes.( 8 Attributes and 1 derived attributes which is age)
49 sql = "INSERT INTO student (Stu_Id, Stu_Name, Birth_Year, Stu_Gender, Current_Year, Stu_Age, Parent_Name, Contact_Num) VALUES (%s, %s, %s, %s,%s,%s,%s,%s)"
50 val = (stu_id, stu_name, birth_year, gender, current_year, age, class_name, parents_name, contact_num)
51 mycursor.execute(sql, val)
52 mydb.commit()
53
54 # To show the data entry is successful or not.
55 if not stu_id or not stu_name or not birth_year or not current_year or not gender or not age or class_name == "Select your class" or not parents_name or not str(contact_num).isdigit() or len(str(contact_num)) != 10:
56     messagebox.showerror("Error", "Please fill in all fields and enter a valid contact number.")
57     return
58
59 messagebox.showinfo("Success", "Student data submitted successfully.")
60 clear_entry_fields()
61 except ValueError:
62     messagebox.showerror("Error", "Invalid input. Please enter valid numeric values for id number, current year, and phone number.")
63     return
64

```

```

65 # Function to save the student information and calculate the age
66 def submit_button_command():
67     calculate_age()
68     submit_registration()
69
70 # Function to reset or clear the data
71 def clear_entry_fields():
72     entry_stu_id.delete(0, tk.END)
73     entry_stu_name.delete(0, tk.END)
74     birth_year_combobox.set("2000")
75     gender_combobox.set("Select your gender")
76     entry_current_year.delete(0, tk.END)
77     entry_age.config(state='normal')
78     entry_age.delete(0, tk.END)
79     entry_age.config(state='readonly')
80     class_name_combobox.set("Select your class")
81     entry_parent_name.delete(0, tk.END)
82     entry_contact_num.delete(0, tk.END)
83
84 # Function to update the information
85 def update_student():
86     try:
87         stu_id = int(entry_stu_id.get())
88         new_class_name = class_name_combobox.get()
89         new_contact_num = entry_contact_num.get()
90
91         # Use placeholders in the SQL query for the fields that need to be updated
92         sql = "UPDATE student SET Stu_Class=%s, Contact_Num=%s WHERE Stu_Id=%s"
93         val = (new_class_name, new_contact_num, stu_id)
94         mycursor.execute(sql, val)
95         mydb.commit()
96
97         messagebox.showinfo("Success", "Student information updated successfully.")
98     except Exception as e:
99         messagebox.showerror("Error", f"An error occurred: {e}")
100

```

```

101 # Function to delete the information
102 def delete_student():
103     try:
104         stu_id = int(entry_stu_id.get())
105         sql = "DELETE FROM student WHERE Stu_Id=%s"
106         val = (stu_id,)
107         mycursor.execute(sql, val)
108         mydb.commit()
109
110         messagebox.showinfo("Success", "Student data deleted successfully.")
111         clear_entry_fields()
112     except ValueError:
113         messagebox.showerror("Error", "Invalid input. Please enter a valid numeric value for id number.")
114         return
115
116
117 # For main Window
118 root = tk.Tk()
119 root.title("Student Registration")
120 root.geometry('400x600')
121 root.configure(bg='#FFE4C4')
122
123 # Title of the page in the main window
124 label = tk.Label(root, text="Student Registration", font=("Sans", 14, "bold"), bg='#FFA07A')
125 label.grid(row=0, column=0, columnspan=3, pady=10, padx=15)
126
127 # Create the ID label
128 label_stu_id = tk.Label(root, text="ID", bg='#FFA07A')
129 label_stu_id.grid(row=1, column=0, padx=10, pady=5, sticky=tk.E)
130 entry_stu_id = tk.Entry(root)
131 entry_stu_id.grid(row=1, column=1, padx=10, pady=5, sticky=tk.W)
132
133 # To create the student name entry
134 label_stu_name = tk.Label(root, text="Name", bg='#FFA07A')
135 label_stu_name.grid(row=2, column=0, padx=10, pady=5, sticky=tk.E)
136 entry_stu_name = tk.Entry(root)
137 entry_stu_name.grid(row=2, column=1, padx=10, pady=5, sticky=tk.W)
138

```

```

139 # To create the birth year spinbox
140 label_birth_year = tk.Label(root, text="Birth Year",bg=('FFA07A'))
141 label_birth_year.grid(row=3, column=0, padx=10, pady=5, sticky=tk.E)
142 birth_year_combobox = ttk.Combobox(root, values=list(range(2000, 2023)))
143 spinbox_birth_year = tk.Spinbox(root, from_=2000, to=2022, textvariable=birth_year_combobox)
144 spinbox_birth_year.grid(row=3, column=1, padx=10, pady=5, sticky=tk.W)
145
146 # To create the gender combobox
147 label_gender = tk.Label(root, text="Gender",bg=('FFA07A'))
148 label_gender.grid(row=4, column=0)
149 gender_combobox = ttk.Combobox(root, values=["Female", "Male"])
150 gender_combobox.grid(row=4, column=1, padx=10, pady=5, sticky=tk.W)
151
152 # To create the current year entry
153 label_current_year = tk.Label(root, text="Today's Year",bg=('FFA07A'))
154 label_current_year.grid(row=5, column=0, padx=10, pady=5, sticky=tk.E)
155 entry_current_year = tk.Entry(root)
156 entry_current_year.grid(row=5, column=1, padx=10, pady=5, sticky=tk.W)
157
158 # To display the age from the calculation of current year and birth year the age is a derived attributes
159 label_age = tk.Label(root, text="Age", bg=('FFA07A'))
160 label_age.grid(row=6, column=0, padx=10, pady=5, sticky=tk.E)
161 entry_age = tk.Entry(root, state='readonly')
162 entry_age.grid(row=6, column=1, padx=10, pady=5, sticky=tk.W)
163
164 # to create the class name selection
165 label_class_name = tk.Label(root, text="Class",bg=('FFA07A'))
166 label_class_name.grid(row=7, column=0)
167 class_name_combobox = ttk.Combobox(root, values=["Class Alpha", "Class Beta", "Class Charlie"])
168 class_name_combobox.grid(row=7, column=1, padx=10, pady=5, sticky=tk.W)
169
170 # To create the parent name entry
171 label_parent_name = tk.Label(root, text="Parent Name", bg=('FFA07A'))
172 label_parent_name.grid(row=8, column=0, padx=10, pady=5, sticky=tk.E)
173 entry_parent_name = tk.Entry(root)
174 entry_parent_name.grid(row=8, column=1, padx=10, pady=5, sticky=tk.W)
175
176 # To create the contact number entry
177 label_contact_num = tk.Label(root, text="Contact Number",bg=('FFA07A'))
178 label_contact_num.grid(row=9, column=0, padx=10, pady=5, sticky=tk.E)
179 entry_contact_num = tk.Entry(root)
180 entry_contact_num.grid(row=9, column=1, padx=10, pady=5, sticky=tk.W)
181
182 # The button to submit the data entry into sql
183 submit_button = tk.Button(root, text="Submit", bg=('FFA07A'),command=submit_button_command)
184 submit_button.grid(row=10, column=0 )
185
186 # Create and place the update button
187 update_button = tk.Button(root, text="Update", bg=('FFA07A'),command=update_student)
188 update_button.grid(row=10, column=1)
189
190 delete_button = tk.Button(root, text="Delete", bg=('FFA07A'), command= delete_student)
191 delete_button.grid(row= 10, column=2)
192
193 root.mainloop()

```

5.2 Teacher Salary Calculator

```
calculator latestttttt.py > ...
1  import tkinter
2  from tkinter import ttk
3  from tkinter import messagebox
4  import mysql.connector
5
6  # Connect to MySQL database
7  mydb = mysql.connector.connect(
8      host="localhost",
9      user="root",
10     password="",
11     database="kindergarten_system"
12 )
13
14 # Create a cursor object to execute SQL queries
15 mycursor = mydb.cursor()
16
17 number_of_subject = 100
18
19 def calculate_net_salary(number_of_subject, monthly_teaching_day, kwsp, socso, income_tax, other):
20     # Calculate gross salary
21     gross_salary = (number_of_subject * 100) * monthly_teaching_day
22     # Calculate net salary
23     net_salary = gross_salary - kwsp - socso - income_tax - other
24     return gross_salary, net_salary
25
26 def save_information():
27     # Get the information
28     number_of_subject = int(number_of_subject_combobox.get())
29     monthly_teaching_day = int(monthly_teaching_day_combobox.get())
30     kwsp = float(kwsp_entry.get())
31     socso = float(socso_entry.get())
32     income_tax = float(tax_entry.get())
33     other = float(other_entry.get())
34
35     if not number_of_subject or not monthly_teaching_day or not kwsp or not socso or not income_tax:
36         # Display an error message
37         messagebox.showerror("Error", "Please fill in all the required fields")
38         return
39
40     else:
41         # Calculate the gross salary and net salary
42         gross_salary, net_salary = calculate_net_salary(number_of_subject, monthly_teaching_day, kwsp, socso, income_tax, other)
43         (variable) gross_salary_output_label: Label
44
45         gross_salary_output_label.config(text=f"Your Gross Salary(RM): {gross_salary:.2f}")
46         net_salary_output_label.config(text=f"Your Net Salary(RM): {net_salary:.2f}")
47
48         # Display a success message
49         messagebox.showinfo("Success", "Your information saved successfully. Gross and Net Salary calculated.")
50
51
52 # To insert your data into your database
53 sql = "INSERT INTO teacher_calculator (number_of_subject, monthly_teaching_day, gross_salary, kwsp, socso, income_tax, other_pay, net_salary) VALUES (%s, %s, %s, %s, %s, %s, %s, %s)"
54 val = (number_of_subject, monthly_teaching_day, gross_salary, kwsp, socso, income_tax, other, net_salary)
55 mycursor.execute(sql, val)
56 mydb.commit()
```

```

57 def update_information():
58     # Get the information
59     number_of_subject = int(number_of_subject_combobox.get())
60     monthly_teaching_day = int(monthly_teaching_day_combobox.get())
61     kwsp = float(kwsp_entry.get())
62     socso = float(socso_entry.get())
63     income_tax = float(tax_entry.get())
64     other = float(other_entry.get())
65
66     if not number_of_subject or not monthly_teaching_day or not kwsp or not socso or not income_tax:
67         # Display an error message
68         messagebox.showerror("Error", "Please fill in all the required fields")
69         return
70
71     else:
72         # Calculate the gross salary and net salary
73         gross_salary, net_salary = calculate_net_salary(number_of_subject, monthly_teaching_day, kwsp, socso, income_tax, other)
74
75         # Display the results
76         gross_salary_output_label.config(text=f"Your Gross Salary(RM): {gross_salary:.2f}")
77         net_salary_output_label.config(text=f"Your Net Salary(RM): {net_salary:.2f}")
78
79         # Display a success message
80         messagebox.showinfo("Success", "Your information updated successfully and have recalculated.")
81
82
83 # Update the data in your database
84 sql = "UPDATE teacher_calculator SET gross_salary = %, kwsp_contributions = %, socso = %, income_tax = %, other_pay = %, net_salary = %s WHERE number_of_subject = %s AND monthly_teaching_day = %s"
85 val = (gross_salary, kwsp, socso, income_tax, other, net_salary, number_of_subject, monthly_teaching_day)
86 mycursor.execute(sql, val)
87 mydb.commit()
88
89
90 def delete_information():
91     # Get the information
92     number_of_subject = int(number_of_subject_combobox.get())
93     monthly_teaching_day = int(monthly_teaching_day_combobox.get())
94
95     if not number_of_subject or not monthly_teaching_day:
96         # Display an error message
97         messagebox.showerror("Error", "Please select the number of subjects and monthly teaching day")
98         return
99
100     else:
101         # Display a success message
102         messagebox.showinfo("Success", "Your information deleted successfully.")
103
104         # Delete the data from your database
105         sql = "DELETE FROM teacher_calculator WHERE number_of_subject = %s AND monthly_teaching_day = %s"
106         val = (number_of_subject, monthly_teaching_day)
107         mycursor.execute(sql, val)
108         mydb.commit()
109
110 # Create the main root
111 root = tkinter.Tk()
112 root.title("Teacher Salary Calculator")
113 root.geometry("400x600")
114 root.configure(bg="#BFEFFF")
115
116 teacher_gross_salary_calculator_frame = tkinter.LabelFrame(root, text="Calculate Your Gross Salary Here!", bg='#8EE5EE')
117 teacher_gross_salary_calculator_frame.grid(padx=30, pady=20)
118
119 number_of_subject_label = tkinter.Label(teacher_gross_salary_calculator_frame, text="Number of Teaching Subject")
120 number_of_subject_combobox = ttk.Combobox(teacher_gross_salary_calculator_frame, values=[1, 2, 3])
121 number_of_subject_label.grid(row=0, column=0)
122 number_of_subject_combobox.grid(row=0, column=1)

```



```

123 monthly_teaching_day_label = tkinter.Label(teacher_gross_salary_calculator_frame, text="Monthly Teaching Day")
124 monthly_teaching_day_combobox = ttk.Combobox(teacher_gross_salary_calculator_frame, values=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20])
125 monthly_teaching_day_label.grid(row=1, column=0)
126 monthly_teaching_day_combobox.grid(row=1, column=1)
127
128 gross_salary_label = tkinter.Label(root, text="Your Gross Salary(RM):")
129 gross_salary_label.grid(row=4, column=0)
130 gross_salary_output_label = ttk.Label(root, text="")
131 gross_salary_output_label.grid()

```

```

133 for widget in teacher_gross_salary_calculator_frame.winfo_children():
134     widget.grid_configure(padx=10, pady=5)
135
136 teacher_net_salary_calculator_frame = tkinter.LabelFrame(root, text="Calculate Your Net Salary Here!", bg='#8EE5EE')
137 teacher_net_salary_calculator_frame.grid(padx=30, pady=20)
138
139 kwsp_label = tkinter.Label(teacher_net_salary_calculator_frame, text="KWSP Contributions (%):")
140 kwsp_label.grid(row=3, column=0)
141 kwsp_entry = ttk.Entry(teacher_net_salary_calculator_frame, width=20)
142 kwsp_entry.grid(row=3, column=1)
143
144 socso_label = tkinter.Label(teacher_net_salary_calculator_frame, text="SOCSSO (%):")
145 socso_label.grid(row=4, column=0)
146 socso_entry = ttk.Entry(teacher_net_salary_calculator_frame, width=20)
147 socso_entry.grid(row=4, column=1)
148
149 tax_label = tkinter.Label(teacher_net_salary_calculator_frame, text="Income Tax (%):")
150 tax_label.grid(row=5, column=0)
151 tax_entry = ttk.Entry(teacher_net_salary_calculator_frame, width=20)
152 tax_entry.grid(row=5, column=1)
153
154 other_label = tkinter.Label(teacher_net_salary_calculator_frame, text="Other Pay (RM):")
155 other_label.grid(row=6, column=0)
156 other_entry = ttk.Entry(teacher_net_salary_calculator_frame, width=20)
157 other_entry.grid(row=6, column=1)
158
159 net_salary_label = tkinter.Label(root, text="Your Net Salary(RM):")
160 net_salary_label.grid(row=8, column=0)
161 net_salary_output_label = ttk.Label(root, text="")
162 net_salary_output_label.grid()

```

```

164 for widget in teacher_net_salary_calculator_frame.winfo_children():
165     widget.grid_configure(padx=10, pady=5)
166
167 save_button = ttk.Button(root, text="Save Information & Calculate Salary", command=save_information,)
168 save_button.grid()
169
170 update_button = ttk.Button(root, text="Update Information", command=update_information)
171 update_button.grid()
172
173 delete_button = ttk.Button(root, text="Delete Information", command=delete_information)
174 delete_button.grid()
175
176 root.mainloop()

```

5.3 Subject Registration

```
1 import tkinter as tk
2 from tkinter import messagebox
3 import mysql.connector
4
5 # Establish a connection to the MySQL server
6 mydb = mysql.connector.connect(
7     host="localhost",
8     user="root",
9     password="",
10    database="kindergarten_system"
11 )
12
13 # Create a cursor object to interact with the database
14 cursor = mydb.cursor()
15
16 def subject_data():
17     student_id = int(student_id_entry.get())
18     student_name = student_name_entry.get()
19     student_age = student_age_spinbox.get()
20
21     selected_subjects = [subject_name[i] for i, is_selected in enumerate(subject_selected) if is_selected.get()]
22
23     # Begin the transaction
24     try:
25         mydb.start_transaction()
26
27         # Inserting data into a table for each selected subject
28         for subject in selected_subjects:
29             sql = "INSERT INTO subject_registration (student_id, student_name, student_age, subject_name) VALUES (%s, %s, %s, %s)"
30             val = (student_id, student_name, student_age, subject)
31             cursor.execute(sql, val)
32             print(f"Data inserted successfully for {subject}")
33
34         # Commit the transaction after all data is inserted
35         mydb.commit()
36         print("All data inserted successfully!")
37
```

```

37
38     except mysql.connector.Error as err:
39         print(f"Error: {err}")
40
41         # Rollback the transaction in case of an error
42         mydb.rollback()
43
44     # Clear the entry fields after each insertion
45     student_id_entry.delete(0, tk.END)
46     student_name_entry.delete(0, tk.END)
47     student_age_spinbox.delete(0, tk.END)
48     for var in subject_selected:
49         var.set(False)
50
51 def insert_data_in_loop():
52     while True:
53         subject_data()
54         answer = messagebox.askquestion("Continue", "Do you want to insert data for another student?")
55         if answer != 'yes':
56             break
57
58 # Tkinter GUI
59 root = tk.Tk()
60 root.title("SUBJECT REGISTRATION")
61 root.geometry("400x600")
62 root.configure(bg='#C1FFC1')
63
64 # Page Title
65 label = tk.Label(root, text='SUBJECT REGISTRATION', font=("Sans", 14, "bold"), bg='#698B69')
66 label.pack(ipadx=10, ipady=15)
67
68 label_student_id = tk.Label(root, text="Student ID")
69 label_student_id.pack()
70 student_id_entry = tk.Entry(root)
71 student_id_entry.pack()
72

```

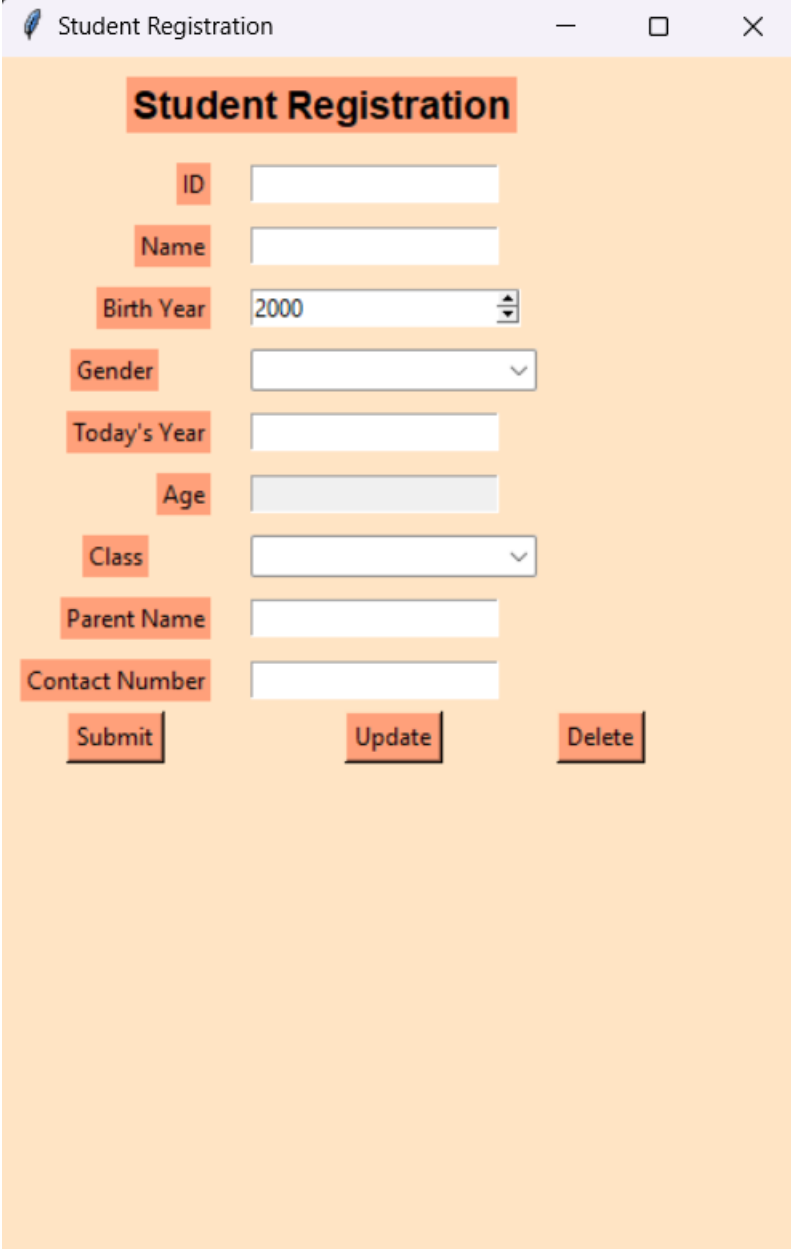
```

73 label_student_name = tk.Label(root, text="Student Name")
74 label_student_name.pack()
75 student_name_entry = tk.Entry(root)
76 student_name_entry.pack()
77
78 # Student Age
79 age_label = tk.Label(root, text="Student Age :")
80 age_label.pack(pady=10)
81 student_age_spinbox = tk.Spinbox(root, from_=4, to=6)
82 student_age_spinbox.pack()
83
84 # Subject Name with Checkbuttons
85 label_subject = tk.Label(root, text="Select Subjects")
86 label_subject.pack(pady=10)
87
88 subject_name = [
89     "ART",
90     "SCIENCE",
91     "READING",
92     "WRITING",
93     "MATHEMATICS",
94 ]
95
96 subject_selected = [tk.BooleanVar() for _ in subject_name]
97
98 for i, subject in enumerate(subject_name):
99     checkbox = tk.Checkbutton(root, text=subject, variable=subject_selected[i])
00     checkbox.pack(pady=3)
01
02 # Button to insert data in a loop until the user decides to stop
03 insert_button_loop = tk.Button(root, text="Insert Data in Loop", bg='#9BCD9B', command=insert_data_in_loop)
04 insert_button_loop.pack(pady=10)
05
06
07 root.mainloop()

```

6.0 SHAPSHOT OF GUI

6.1 Student Registration



The screenshot shows a web browser window titled "Student Registration". The page has an orange background and a title "Student Registration" in bold black text. Below the title, there are several input fields and buttons. The fields are labeled "ID", "Name", "Birth Year", "Gender", "Today's Year", "Age", "Class", "Parent Name", and "Contact Number". The "Birth Year" field contains the value "2000". The "Gender" and "Class" fields are dropdown menus. At the bottom, there are three buttons: "Submit", "Update", and "Delete".

Field Label	Value / Type
ID	<input type="text"/>
Name	<input type="text"/>
Birth Year	2000
Gender	<input type="text"/>
Today's Year	<input type="text"/>
Age	<input type="text"/>
Class	<input type="text"/>
Parent Name	<input type="text"/>
Contact Number	<input type="text"/>

Buttons:

6.2 Teacher Salary Calculator

Teacher Salary Calculator

Calculate Your Gross Salary Here!

Number of Teaching Subject

Monthly Teaching Day

Your Gross Salary(RM):

Calculate Your Net Salary Here!

KWSP Contributions (%):

SOCSSO (%):

Income Tax (%):

Other Pay (RM):

Your Net Salary(RM):

Save Information & Calculate Salary

Update Information

Delete Information

6.3 Subject Registration

SUBJECT REGISTRATION

Student ID

Student Name

Student Age :

4

Select Subjects

☐ ART

☐ SCIENCE

☐ READING

☐ WRITING

☐ MATHEMATICS

Insert Data in Loop

7.0 SHAPSHOT OF DATABASE

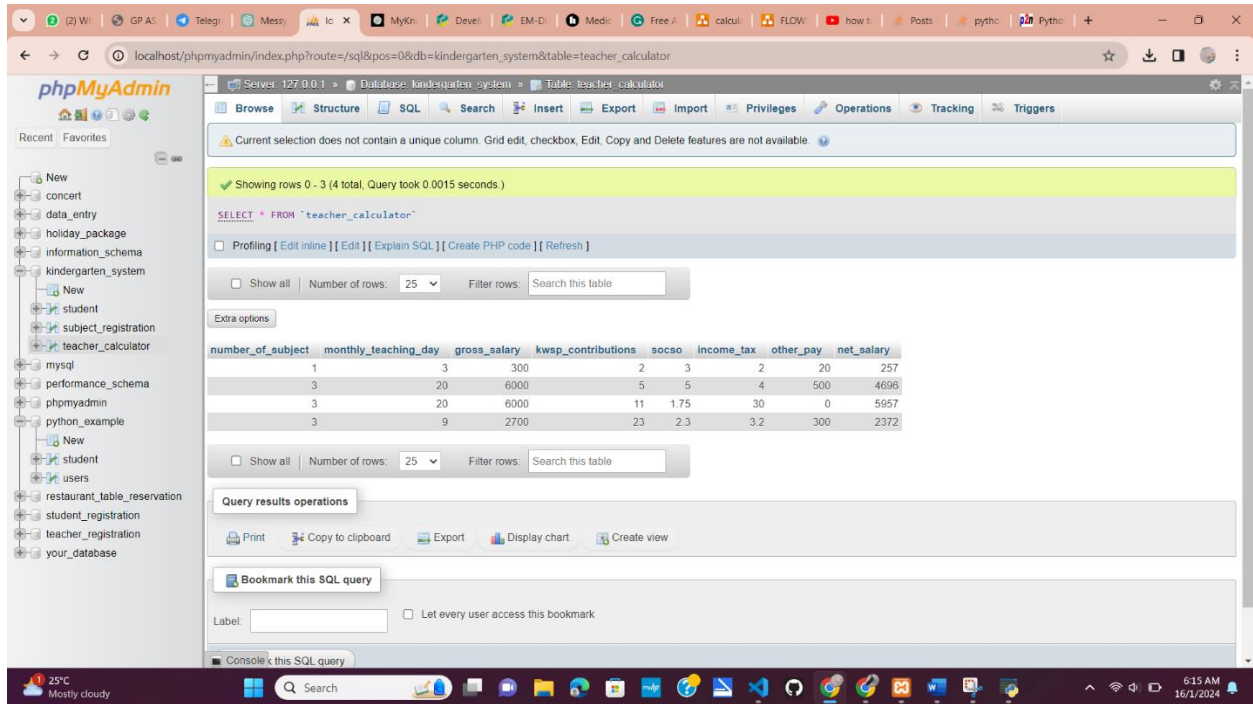
7.1 Student Registration

The screenshot shows the phpMyAdmin interface for a database named 'kindergarten_system'. The 'student' table is selected, and the SQL query 'SELECT * FROM `student`' is executed. The results show 9 rows of student data. The table structure is as follows:

Stu_Id	Stu_Name	Birth_Year	Stu_Gender	Current_Year	Stu_Age	Stu_Class	Parent_Name	Contact_Num
20232810	QISTINA RAISYA AKMAL	2018	Female	2024	6	Class Alpha	AKMAL BIN JAMAL	0146075536
20237432	NUR MELISSA BINTI ZIZAN	2018	Female	2024	6	Class Beta	ZIZAN BIN RAHIM	0133676674
20234557	NUR AMERNA BINTI FAUZI	2018	Female	2024	6	Class Charlie	IZATI BINTI ZAMRI	0114413004
20235481	SYED AHMAD BIN SYED ZAKI	2019	Male	2024	5	Class Alpha	ASYIKIN BINTI ZAHAR	0136613731
20236451	AMNA MEDINA BINTI HARIZ	2019	Female	2024	5	Class Beta	NINA BINTI ARIF	0122244171
20231054	MUHAMMAD ALIF BIN HARIZ	2019	Male	2024	5	Class Charlie	NINA BINTI ALIF	0122244171
20238148	AIN AMIRAH BINTI ALI	2020	Female	2024	4	Class Alpha	ALI BIN ALIF	0115061430
20235264	AMIR BADRISHAH BIN ABU	2020	Male	2024	4	Class Beta	ABU BIN ARIFIN	0126670053
20236112	AIDA ELYANA BINTI ZAIDI	2020	Female	2024	4	Class Charlie	AZIZAH BINTI KAMAL	0115543111

Stu_Id	Stu_Name	Birth_Year	Stu_Gender	Current_Year	Stu_Age	Stu_Class	Parent_Name	Contact_Num
20232810	QISTINA RAISYA AKMAL	2018	Female	2024	6	Class Alpha	AKMAL BIN JAMAL	0146075536
20237432	NUR MELISSA BINTI ZIZAN	2018	Female	2024	6	Class Beta	ZIZAN BIN RAHIM	0133676674
20234557	NUR AMERNA BINTI FAUZI	2018	Female	2024	6	Class Charlie	IZATI BINTI ZAMRI	0114413004
20235481	SYED AHMAD BIN SYED ZAKI	2019	Male	2024	5	Class Alpha	ASYIKIN BINTI ZAHAR	0136613731
20236451	AMNA MEDINA BINTI HARIZ	2019	Female	2024	5	Class Beta	NINA BINTI ARIF	0122244171
20231054	MUHAMMAD ALIF BIN HARIZ	2019	Male	2024	5	Class Charlie	NINA BINTI ALIF	0122244171
20238148	AIN AMIRAH BINTI ALI	2020	Female	2024	4	Class Alpha	ALI BIN ALIF	0115061430
20235264	AMIR BADRISHAH BIN ABU	2020	Male	2024	4	Class Beta	ABU BIN ARIFIN	0126670053
20236112	AIDA ELYANA BINTI ZAIDI	2020	Female	2024	4	Class Charlie	AZIZAH BINTI KAMAL	0115543111

7.2 Teacher Salary Calculator



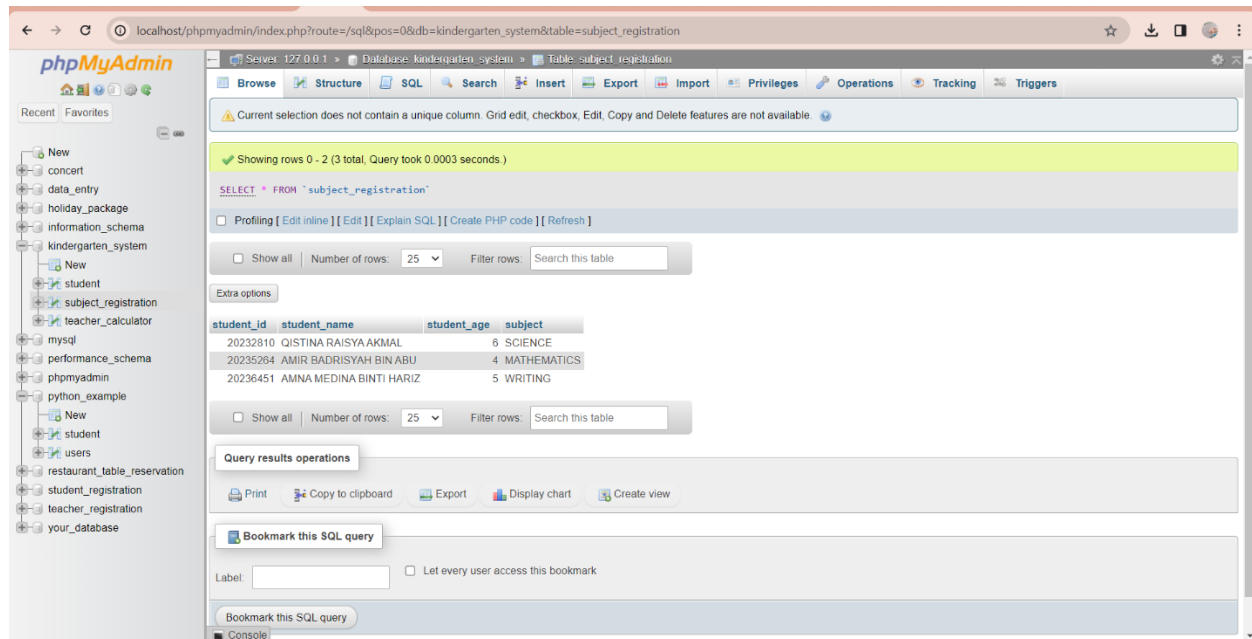
The screenshot shows the phpMyAdmin web interface. The left sidebar displays a database structure with several databases, including 'kindergarten_system' which contains the 'teacher_calculator' table. The main panel shows the table's data. A message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green bar indicates 'Showing rows 0 - 3 (4 total. Query took 0.0015 seconds)'. The SQL query 'SELECT * FROM `teacher_calculator`' is shown. The table data is as follows:

number_of_subject	monthly_teaching_day	gross_salary	kwsp_contributions	socso	income_tax	other_pay	net_salary
1	3	300	2	3	2	20	257
3	20	6000	5	5	4	500	4696
3	20	6000	11	1.75	30	0	5957
3	9	2700	23	2.3	3.2	300	2372

Below the table, there are options to 'Show all', 'Number of rows: 25', and a 'Filter rows' search box. Further down, there are 'Query results operations' (Print, Copy to clipboard, Export, Display chart, Create view) and a 'Bookmark this SQL query' section with a label input and a checkbox 'Let every user access this bookmark'.

number_of_subject	monthly_teaching_day	gross_salary	kwsp_contributions	socso	income_tax	other_pay	net_salary
1	3	300	2	3	2	20	257
3	20	6000	5	5	4	500	4696
3	20	6000	11	1.75	30	0	5957
3	9	2700	23	2.3	3.2	300	2372

7.3 Subject Registration



The screenshot shows the phpMyAdmin web interface. The left sidebar displays a database structure with 'kindergarten_system' selected, containing tables like 'student', 'subject_registration', and 'teacher_calculator'. The main panel shows the 'subject_registration' table with 3 rows. A message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' The SQL query 'SELECT * FROM `subject_registration`' is entered in the query box. Below the query, the table data is displayed:

student_id	student_name	student_age	subject
20232810	QISTINA RAISYA AKMAL	6	SCIENCE
20235264	AMIR BADRISYAH BIN ABU	4	MATHEMATICS
20236451	AMNA MEDINA BINTI HARIZ	5	WRITING

Below the table, there are options for 'Show all', 'Number of rows: 25', and a 'Filter rows' search box. Further down, there are 'Query results operations' (Print, Copy to clipboard, Export, Display chart, Create view) and a 'Bookmark this SQL query' section with a label input and a checkbox 'Let every user access this bookmark'.

student_id	student_name	student_age	subject
20232810	QISTINA RAISYA AKMAL	6	SCIENCE
20235264	AMIR BADRISYAH BIN ABU	4	MATHEMATICS
20236451	AMNA MEDINA BINTI HARIZ	5	WRITING

8.0 CONCLUSION

In conclusion, this project has been a collaborative effort to address and improve key challenges within the kindergarten environment. Through the integration of coding, flowchart design, and database implementation, our team has worked diligently to enhance the registration process, simplify salary calculations for teachers, and provide students with a more accessible platform for subject registration.

As we conclude this assignment, we reflect on the progress made and the impact our solutions may have on the kindergarten community. The systematic registration process ensures that no one is left behind, promoting inclusivity and efficiency. Teachers can now navigate their salary calculations with ease, allowing them to focus more on their invaluable role in shaping young minds. Students also benefit from a user-friendly platform that facilitates informed decisions regarding their subject choices.

As we look toward the future, we remain committed to the ongoing exploration and application of technology in educational settings. By leveraging the subject of programming for libraries, we can continue to innovate and create solutions that address the evolving needs of the kindergarten community. This project serves as a stepping stone towards a more efficient, accessible, and technologically empowered kindergarten experience.