



اُنْدِيُوْسَرَسِيْ اِتِيْكَوْلُوْكَنِيْ فَاِمَارَا  
**UNIVERSITI  
TEKNOLOGI  
MARA**

**FACULTY OF INFORMATION SCIENCE STUDIES COLLEGE  
OF COMPUTING,INFORMATICS AND MEDIA**

**UNIVERSITY TEKNOLOGI MARA**

**DIPLOMA IN LIBRARY INFORMATICS(IM144)**

**PROGRAMMING FOR LIBRARIES (IML208)**

**ASSIGNMENT 1: ELECTRIC DEVICE REGISTRATION**

**PREPARED BY:**

**Muhammad Faris Izzat bin Mohamad Tarmizi  
(2022818042)**

**CLASS:CDIM1443B**

**PREPARED FOR:**

**SIR AIRUL SHAZWAN BIN NORSHAHMI**

**SUBMISSION DATE: 4 JANUARY 2024**

## ASSIGNMENT 1: ELECTRIC DEVICE REGISTRATION

MUHAMMAD FARIS IZZAT BIN MOHAMAD TARMIZI

2022818042

DIPLOMA IN LIBRARY INFORMATICS (IM144)

UNIVERSITY TECHNOLOGY MARA (UiTM) KEDAH BRANCH

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

4 JANUARY 2024



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- b. **Plagiarism:** Using or attempts to use the work of others (ideas, design, words, art, music, etc.) without acknowledging the source; using or purchasing materials prepared by another person or agency or engaging in other behavior that a reasonable person would consider as plagiarism.
- c. **Fabrication:** Falsifying data, information, or citations in any academic assessment and evaluation.
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With this pledge, I am fully aware that I am obliged to conduct myself with utmost honesty and integrity. I fully understand that a disciplinary action can be taken against me if I, in any manner, violate this pledge.

**Name : MUHAMMAD FARIS IZZAT BIN HJ MOHAMAD TARMIZI**

**Matric Number : 2022818042**

**Course Code : IML208**

**Programme Code :-**

**Faculty / Campus : UiTM Kampus Sungai Petani**

## 1.0 INTRODUCTION

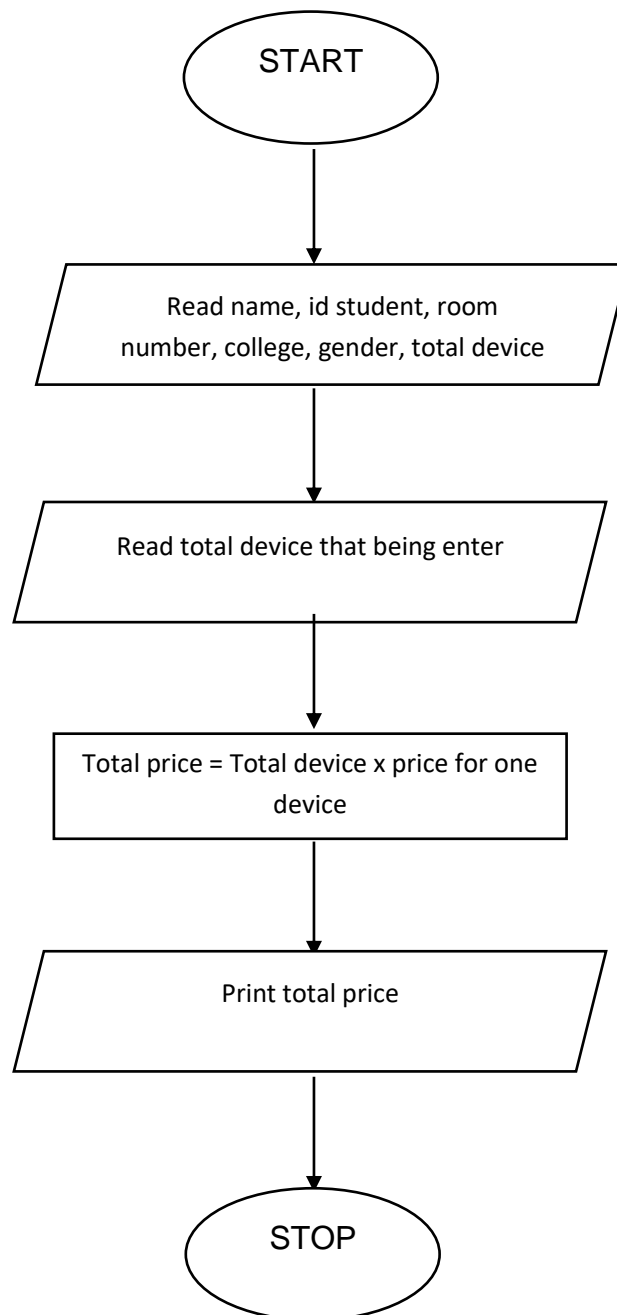
Electric device registration is a system that help a certain institution to trace the exact number of electric device that being brought by person or student. This system can help the person or users to know the exact amount of price they need to pay for their electric device. How much the electric device they bring so they can easily calculate and pay the amount of fee they need to pay for each electric device they bring.

First of all they need to enter their full name so the admin of the system can know the person or the user that want to use the system. Next the users need to enter their id numbers as a student. After that they need to enter their room number and their college so the admin can know their exact location to trace them. After that they will need to choose their gender.

In the system, the fee of one electric device already been given. So lastly, the student must enter their total electric device that they bring to the college. After that they can click submit and the total fee they need to pay will appear. So they will know how much they need to pay to the institution, This will make the student registration far more easy than others.

After they enter all the information that they enter, the information will be saved for the future used.

## 2.0 FLOW CHART FOR ELECTRIC DEVICE REGISTRATION



### 3.0 CODE FOR ELECTRIC DEVICE REGISTRATION

```
individual_assignment.py > ...
1  import tkinter as tk
2  import array
3  from tkinter import ttk
4  import mysql.connector
5
6  mydb = mysql.connector.connect(
7      host="localhost",
8      user="root",
9      password="",
10     database="electric_device_registration"
11 )
```

```
12
13  # Create a cursor object to execute SQL queries
14  mycursor = mydb.cursor()
15
16
17
18  # Function to handle the calculation and database saving
19  def SUBMIT():
20      Student_name = Student_name_entry.get()
21      Student_id_number = Student_id_number_entry.get()
22      Student_room_number = Student_room_number_entry.get()
23      Student_college = Student_college_combobox.get()
24      Student_gender = Student_gender_combobox.get()
25      Student_total_device = int(Student_total_device_entry.get())
26
```

```
26
27      # Calculate the total price
28      total_price = Student_total_device * 10
29
30      # To print information on terminal
31      print("id_student", Student_id_number)
32      print("name", Student_name)
33      print("room number", Student_room_number)
34      print("college" , Student_college)
35      print("gender" , Student_gender)
36      print("Total Price = RM" , total_price)
37
```

```

37
38 sql = "INSERT INTO registration_information (Student_name, Student_id_number, Student_room_number, Student_college, Student_gender, Student_total_device, total_price )"
39 val = (Student_name, Student_id_number, Student_room_number, Student_college, Student_gender, Student_total_device, total_price )
40 mycursor.execute(sql, val)
41 mydb.commit()
42
43 # To Print back The output. It will happen in the function collect_data(). The f before the string indicates an f-string in Python.
44 output_Student.config(text=f"Total Price : RM{total_price}")
45

```

```

) VALUES (%s, %s, %s, %s, %s, %s, %s)"

```

```

48
49 #create window
50 root = tk.Tk()
51 root.geometry("520x490")
52 root.title("student electric device registration" )
53 root.configure (bg="#808080")
54
55 label = tk.Label(root, text='Electric Device registration', font=("Times New Romans",14, "bold"))
56 label.grid(column= 4, row=39 , pady=37)
57

```

```

59 #student_info
60
61 Student_name = tk.Label(root,text=("Name"))
62 Student_name.grid(row=3, column=3 )
63 Student_name_entry=tk.Entry(root)
64 Student_name_entry.grid(row=4, column=3)
65
66 Student_id_number = tk.Label(root,text=("id number"))
67 Student_id_number.grid(row=3, column=5)
68 Student_id_number_entry=tk.Entry(root)
69 Student_id_number_entry.grid(row=4, column=5)
70
71 Student_room_number = tk.Label(root,text=("room number"))
72 Student_room_number.grid(row=5, column=3)
73 Student_room_number_entry=tk.Entry(root)
74 Student_room_number_entry.grid(row=6, column=3)
75

```

```

76 Student_college = tk.Label(root,text=("college"))
77 Student_college.grid(row=5, column=5)
78 Student_college_combobox=ttk.Combobox(root , values= ["Melati" , "Malinja" , "Mawar"])
79 Student_college_combobox.grid(row=6, column=5)
80
81 Student_gender = tk.Label(root,text=("gender"))
82 Student_gender.grid(row=11, column=4)
83 Student_gender_combobox=ttk.Combobox (root, values= ["Men" , "Women"])
84 Student_gender_combobox.grid(row=12, column=4)
85
86 price_text=tk.Text(root, height=7 , width=16)
87 price_text.grid(row=20, column=4)
88
89 price_text.insert(tk.END, "Device Price:\n\n")
90 price_text.insert(tk.END, "One Electric\n Device:\n Price:RM10\n\n")
91

```

```

92
93 Student_total_device = tk.Label(root,text=("Total Device"))
94 Student_total_device.grid(row=23, column=4)
95 Student_total_device_entry=tk.Entry(root)
96 Student_total_device_entry.grid(row=24, column=4)
97
98 # Output Result
99 Student = tk.Label(root, text='Total', font=("Times New Romans",12))
100 Student.grid(row=25, column=4)
101 output_Student = tk.Label(root, text="")
102 output_Student.grid(row = 31, column = 4)
103
104 # Submit Button
105 create_table_button=tk.Button(root,text=("SUBMIT"), command=SUBMIT)
106 create_table_button.grid(row=27, column= 4)
107 root.mainloop()

```



#### 4.0 GUI FOR ELECTRIC DEVICE REGISTRATION

The screenshot shows a Java Swing window titled "student electric device registration". The window contains a registration form with the following elements:

- Name**: A text input field.
- id number**: A text input field.
- room number**: A text input field.
- college**: A text input field with a dropdown arrow.
- gender**: A dropdown menu.
- Device Price:** A text area containing the text "One Electric Device: Price:RM10".
- Total Device**: A text input field.
- Total**: A text input field.
- SUBMIT**: A button.

At the bottom of the window, there is a label **Electric Device registration**.

## 5.0 DATABASE FOR ELECTRIC DEVICE REGISTRATION

### THE STRUCTURE

The screenshot shows the phpMyAdmin interface for the 'electric\_device\_registration' database. The 'Table structure' tab is selected for the 'registration\_information' table. The table has 7 columns:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Student_name	text	utf8mb4_general_ci		No	None			Change Drop More
2	Student_id_number	int(10)			No	None			Change Drop More
3	Student_room_number	varchar(5)	utf8mb4_general_ci		No	None			Change Drop More
4	Student_college	text	utf8mb4_general_ci		No	None			Change Drop More
5	Student_gender	text	utf8mb4_general_ci		No	None			Change Drop More
6	Student_total_device	varchar(20)	utf8mb4_general_ci		No	None			Change Drop More
7	total_price	varchar(5)	utf8mb4_general_ci		No	None			Change Drop More

Below the table structure, there are options to 'Check all', 'With selected', and 'Remove from central columns'. There are also buttons for 'Browse', 'Change', 'Drop', 'Primary', 'Unique', 'Index', 'Spatial', 'Fulltext', and 'Add to central columns'.

### THE BROWSE

The screenshot shows the phpMyAdmin interface for the 'electric\_device\_registration' database. The 'Browse' tab is selected for the 'registration\_information' table. The table contains 10 rows of data:

Student_name	Student_id_number	Student_room_number	Student_college	Student_gender	Student_total_device	total_price
MUHAMMAD HANIF AIMAN KAMARUZAMAN	2022871792	A021	Malinja	Men	3	
FARIS IZZAT	2022818042	A012	Malinja	Men	4	
MUHAMMAD AMMAR BIN KHAMISAN	2022667383	A120	Malinja	Men	10	100
hafizul zaheen	2022661936	B318	Melati	Men	8	80
	0				3	30
	0				2	20
	0				5	50
	0				7	70
MUHAMMAD HANIF AIMAN BIN KAMARUZAMAN	2022871792	A021	Malinja	Men	2	20
MUHAMMAD FARIS IZZAT BIN TIRMIZI	2022862749		Malinja	Men	6	60

Below the table, there are options to 'Show all', 'Number of rows', and 'Filter rows'. There are also buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'.

## 6.0 CONCLUSION

In conclusion, the system that I finally able to create are already being test and being confirm about it functionality. Even though this system is simple, I still take a lot of time to do it, as I am not really well in the coding. This system can help the users to know about the fee they need to pay with a lot more easier

The system allows users to input information such as student name, ID number, room number, college, gender, and the total number of devices. Upon clicking the "SUBMIT" button, the program calculates the total price based on the number of devices and prints the student's information along with the calculated total price to the terminal.

The GUI interface is user-friendly, featuring entry fields, labels, and combo boxes for selecting options. The program also provides a text display for information about device prices and includes an output label to display the calculated total price after submission.

Overall, this script serves as a basic framework for a student electric device registration system, and further enhancements and integrations can be made to expand its functionality and improve the user experience.