



COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS  
UNIVERSITI TEKNOLOGI MARA  
MERBOK, KEDAH

DIPLOMA IN LIBRARY INFORMATICS  
(IM144)

PROGRAMMING FOR LIBRARIES  
(IML208)

**GROUP ASSIGNMENT: "SPORT CENTRE"**

PREPARED BY:

NAME	MATRICS NUMBER
BALQIS BATRISYIA BINTI AZHAROLKHAIR	2022818714
HAWA NABILA BINTI HANIF	2022625444
NUR ALYA IXORA BINTI ROSLAN	2022661708
NUR ATIFAH SOPHIA BINTI SABRY	2022457012

CLASS:  
KCDIM1443F

PREPARED FOR:  
SIR AIRUL SHAZWAN BIN NORSHAHIMI

SUBMISSION DATE:  
17 JANUARY 2024

GROUP ASSIGNMENT: "SPORT CENTRE"

BALQIS BATRISYIA BINTI AZHAROLKHAIR	2022818714
HAWA NABILA BINTI HANIF	2022625444
NUR ALYA IXORA BINTI ROSLAN	2022661708
NUR ATIFAH SOPHIA BINTI SABRY	2022457012

KCDIM1443F

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS  
UNIVERSITI TEKNOLOGI MARA  
MERBOK, KEDAH

17 JANUARY 2024



## STUDENT PLEDGE OF ACADEMIC INTEGRITY

As a student of Universiti Teknologi MARA (UiTM), it is my responsibility to act in accordance with UiTM's academic assessment and evaluation policy. I hereby pledge to act and uphold academic integrity and pursue scholarly activities in UiTM with honesty and responsible manner. I will not engage or tolerate acts of academic dishonesty, academic misconduct, or academic fraud including but not limited to:

- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration on an assignment or open book tests, or engaging in any act or conduct that can be construed as cheating.
- 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.
- d. **Deception:** Providing false information with intend to deceive an instructor concerning any academic assessment and evaluation.
- e. **Furnishing false information:** Providing false information or false representation to any UiTM official, instructor, or office.

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: Balqis Batrisyia binti Azharolkhair**

**Matric Number: 2022818714**

**Course Code: IML208**

**Programme code: CDIM144**

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

*\*Students are required to sign one pledge for each course taken.*



## STUDENT PLEDGE OF ACADEMIC INTEGRITY

As a student of Universiti Teknologi MARA (UiTM), it is my responsibility to act in accordance with UiTM's academic assessment and evaluation policy. I hereby pledge to act and uphold academic integrity and pursue scholarly activities in UiTM with honesty and responsible manner. I will not engage or tolerate acts of academic dishonesty, academic misconduct, or academic fraud including but not limited to:

- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration on an assignment or open book tests, or engaging in any act or conduct that can be construed as cheating.
- 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.
- d. **Deception:** Providing false information with intend to deceive an instructor concerning any academic assessment and evaluation.
- e. **Furnishing false information:** Providing false information or false representation to any UiTM official, instructor, or office.

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:** Hawa Nabila binti Hanif

**Matric Number:** 2022625444

**Course Code:** IML208

**Programme code:** CDIM144

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

\*Students are required to sign one pledge for each course taken.

Bahagian Pentaksiran dan Penilaian Akademik 2021



## STUDENT PLEDGE OF ACADEMIC INTEGRITY

As a student of Universiti Teknologi MARA (UiTM), it is my responsibility to act in accordance with UiTM's academic assessment and evaluation policy. I hereby pledge to act and uphold academic integrity and pursue scholarly activities in UiTM with honesty and responsible manner. I will not engage or tolerate acts of academic dishonesty, academic misconduct, or academic fraud including but not limited to:

- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration on an assignment or open book tests, or engaging in any act or conduct that can be construed as cheating.
- 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.
- d. **Deception:** Providing false information with intend to deceive an instructor concerning any academic assessment and evaluation.
- e. **Furnishing false information:** Providing false information or false representation to any UiTM official, instructor, or office.

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: Nur Alya Ixora binti Roslan**

**Matric Number: 2022661708**

**Course Code: IML208**

**Programme code: CDIM144**

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

\*Students are required to sign one pledge for each course taken.

Bahagian Pentaksiran dan Penilaian Akademik 2021



## STUDENT PLEDGE OF ACADEMIC INTEGRITY

As a student of Universiti Teknologi MARA (UiTM), it is my responsibility to act in accordance with UiTM's academic assessment and evaluation policy. I hereby pledge to act and uphold academic integrity and pursue scholarly activities in UiTM with honesty and responsible manner. I will not engage or tolerate acts of academic dishonesty, academic misconduct, or academic fraud including but not limited to:

- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration on an assignment or open book tests, or engaging in any act or conduct that can be construed as cheating.
- 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.
- d. **Deception:** Providing false information with intend to deceive an instructor concerning any academic assessment and evaluation.
- e. **Furnishing false information:** Providing false information or false representation to any UiTM official, instructor, or office.

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: Nur Atifah Sophia binti Sabry**

**Matric Number: 2022457012**

**Course Code: IML208**

**Programme code: CDIM144**

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

\*Students are required to sign one pledge for each course taken.

Bahagian Pentaksiran dan Penilaian Akademik 2021

## ACKNOWLEDGEMENT

First and foremost, praises and thanks to Allah for his showers of blessings throughout our task to complete the assignment successfully.

To everyone who helped to finish this report, I would like to extend my deepest gratitude. Throughout this process, their assistance, direction, and encouragement have been priceless.

I would like to express my sincere gratitude to Sir Airul Shazwan Bin Norshahimi , our beloved lecturer, for his steadfast support and astute direction. His knowledge and helpful criticism have been very helpful in determining the focus and substance of this study.

Additionally, I want to express my gratitude to my team members for their assistance and contributions. Their commitment and diligence have greatly improved the quality of this report. I am thankful of my friends' and family's patience, support, and understanding during this project's challenging stages. Their unwavering assistance has been as a continual source of inspiration.

In conclusion, we would like to thank all the individuals who helped us in this journey. Your contributions were instrumental in the successful completion of this assignment, and we are deeply grateful for your support. Thank you.

## TABLE OF CONTENT

ACKNOWLEDGEMENT .....	7
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
<b>1.1 OBJECTIVES .....</b>	<b>1</b>
<b>2.0 FLOWCHART .....</b>	<b>2</b>
<b>2.1 USER ACCOUNT .....</b>	<b>2</b>
<b>2.2 FACILITY MANAGEMENT .....</b>	<b>3</b>
<b>2.3 REPORTING TOOLS.....</b>	<b>4</b>
<b>3.0 CODE .....</b>	<b>5</b>
<b>4.0 GUI.....</b>	<b>12</b>
<b>5.0 DATABASE.....</b>	<b>14</b>
<b>6.0 CONCLUSION .....</b>	<b>16</b>



## **1.0 INTRODUCTION**

To begin with, the Sports Centre is a facility that provides sports equipment, places, and services to the user. This system of the Sports Centre includes user information, facility management, and reporting damaged tools to ensure that the centre's activities are running smoothly and systematically. In addition, this system aims to be implemented in academic institutions, mainly to help the centre management, which is usually managed by staff and students as helpers. Furthermore, it is user-friendly because this system is easy to handle and adapt to the management.

To be clear, users who want to use the facilities provided by the centre need to fill in their information in the form and submit it so that the data will be recorded in the database. Subsequently, users can choose the court or place they want to use depending on their availability and the equipment they need. All this information is needed to ensure the users book the place and the equipment before use. Thus, there will be less risk of overlapping bookings that eventually lead to other problems of dissatisfaction among the users.

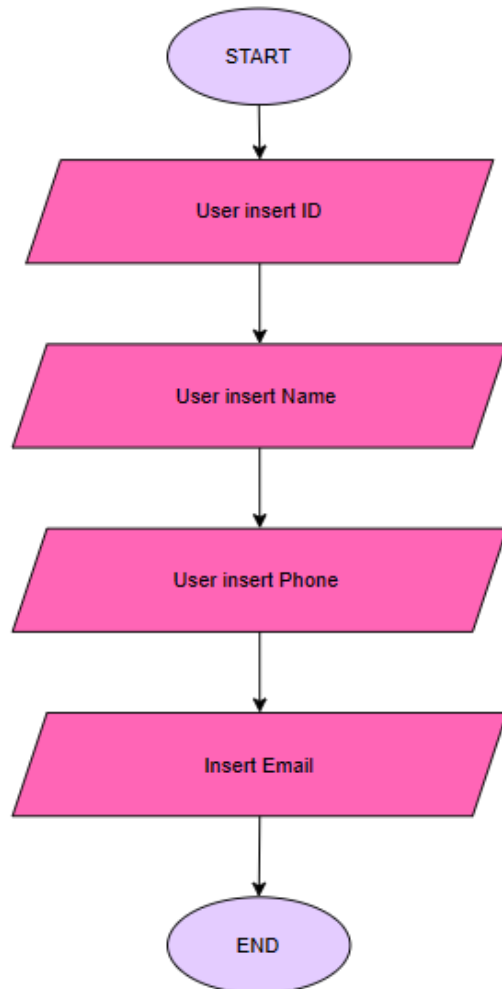
Other than that, there is also a platform to report damaged tools. In this case, the staff or person in responsibility need to fill in the information about the item that has been broken or damaged. The item type and total number of damaged items must be inserted to calculate the total price. The item type, total damages and the total price will be displayed at the end of the form so that the staff can be informed about the report they made as a summary. All the data will be recorded in the database to ensure that the management can keep track of the condition of all their equipment and provide the best services and facilities to the users.

## **1.1 OBJECTIVES**

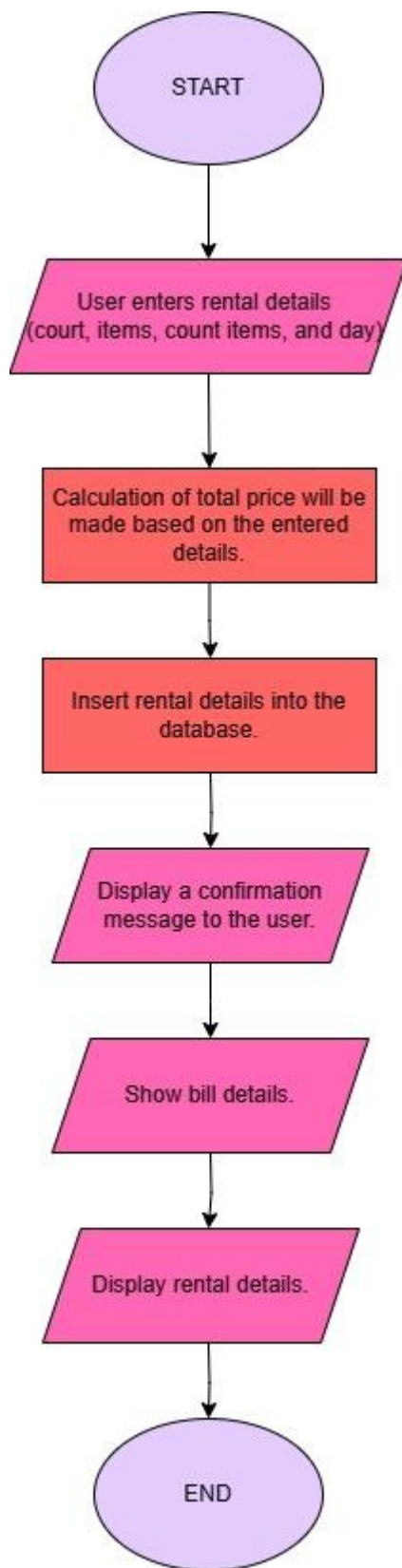
1. To lend items or courts that available.
2. To improve the lending system of the sport centre.
3. To motivate students to exercise more or play sports.
4. Our target user: University students

## 2.0 FLOWCHART

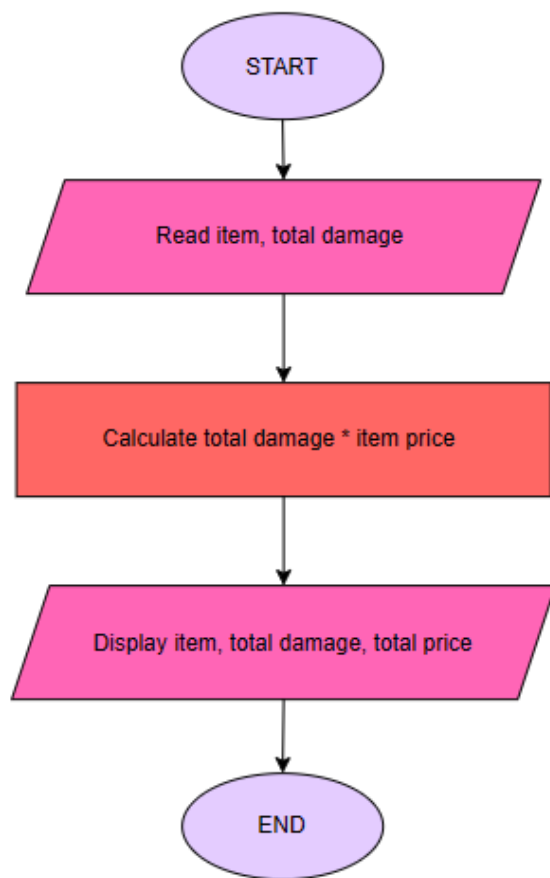
### 2.1 USER ACCOUNT



## 2.2 FACILITY MANAGEMENT



## 2.3 REPORTING TOOLS



## 3.0 CODE

```
MainMenu.py
group_assignment > MainMenu.py > DamageReportingWindow > _init_
1  import tkinter as tk
2  from tkinter import messagebox
3  import mysql.connector
4
5  mydb = mysql.connector.connect(
6      host="localhost",
7      user="root",
8      password="",
9      database="sport_centre"
10 )
11
12 cursor = mydb.cursor()
13
14 class MainMenu(tk.Tk):
15     def __init__(self):
16         tk.Tk.__init__(self)
17         self.title("Main Menu")
18         self.geometry('400x300')
19         self.configure(bg='#660000')
20
21         label = tk.Label(self, text='SPORT CENTRE', font=("Montserrat Medium", 28, "bold"), bg='#660000', fg='tan')
22         label.pack(ipadx=10, ipady=10)
23
24         #Buttons
25         buttons = [
26             ("Registration", self.show_registration),
27             ("Facility Rental", self.show_facility_rental),
28             ("Damage Reporting", self.show_damage_reporting)
29         ]
```

```
30
31         for text, command in buttons:
32             button = tk.Button(self, text=text, command=command, bg='#660000', fg='tan', font=("Georgia", 10))
33             button.pack(pady=10, ipadx=10, ipady=5)
34
35     def show_registration(self):
36         RegistrationWindow(self)
37
38     def show_damage_reporting(self):
39         DamageReportingWindow(self)
40
41     def show_facility_rental(self):
42         FacilityRentalWindow(self)
43
44 class RegistrationWindow(tk.Toplevel):
45     def __init__(self, main_menu):
46         tk.Toplevel.__init__(self)
47         self.main_menu = main_menu
48         self.title("Registration Form")
49         self.geometry('350x300')
50         self.configure(bg='#660000')
51
52         self.label_name = tk.Label(self, text="Name:", bg='#660000', fg='white', font=("Georgia",8))
53         self.label_name.grid(row=0, column=0, padx=10, pady=10)
54         self.label_id = tk.Label(self, text="ID:", bg='#660000', fg='white', font=("Georgia",8))
55         self.label_id.grid(row=1, column=0, padx=10, pady=10)
56         self.label_phone = tk.Label(self, text="Phone:", bg='#660000', fg='white', font=("Georgia",8))
57         self.label_phone.grid(row=2, column=0, padx=10, pady=10)
58         self.label_email = tk.Label(self, text="Email:", bg='#660000', fg='white', font=("Georgia",8))
```

```

57 self.label_phone.grid(row=2, column=0, padx=10, pady=10)
58 self.label_email = tk.Label(self, text="Email:", bg='#660000', fg='white', font=("Georgia",8))
59 self.label_email.grid(row=3, column=0, padx=10, pady=10)
60
61 self.entry_name = tk.Entry(self)
62 self.entry_name.grid(row=0, column=1, padx=10, pady=10)
63 self.entry_id = tk.Entry(self)
64 self.entry_id.grid(row=1, column=1, padx=10, pady=10)
65 self.entry_phone = tk.Entry(self)
66 self.entry_phone.grid(row=2, column=1, padx=10, pady=10)
67 self.entry_email = tk.Entry(self)
68 self.entry_email.grid(row=3, column=1, padx=10, pady=10)
69
70 # Buttons
71 self.btn_insert = tk.Button(self, text="Insert", command=self.insert_data, bg='tan', fg='black', font=("Georgia", 8))
72 self.btn_insert.grid(row=4, column=0, padx=5, pady=10)
73
74 self.btn_update = tk.Button(self, text="Update", command=self.update_data, bg='tan', fg='black', font=("Georgia", 8))
75 self.btn_update.grid(row=4, column=1, padx=5, pady=10)
76
77 self.btn_delete = tk.Button(self, text="Delete", command=self.delete_data, bg='tan', fg='black', font=("Georgia", 8))
78 self.btn_delete.grid(row=4, column=2, padx=5, pady=10)
79
80 def insert_data(self):
81     id = self.entry_id.get()
82     name = self.entry_name.get()
83     phone = self.entry_phone.get()
84     email = self.entry_email.get()
85

```

```

86 if not name or not phone or not email:
87     messagebox.showerror("Error", "Please fill in all fields.")
88     return
89
90 sql = "INSERT INTO registration (ID, Name, Phone, Email) VALUES (%s, %s, %s, %s)"
91 val = (id, name, phone, email)
92
93 print(f"Executing SQL: {sql} with values {val}")
94
95 try:
96     cursor.execute(sql, val)
97     mydb.commit()
98     messagebox.showinfo("Success", "Record inserted successfully!")
99 except mysql.connector.Error as err:
100     messagebox.showerror("Error", f"Error inserting record: {err}")
101
102 def update_data(self):
103     id = self.entry_id.get()
104     name = self.entry_name.get()
105     phone = self.entry_phone.get()
106     email = self.entry_email.get()
107
108 if not id or not name or not phone or not email:
109     messagebox.showerror("Error", "Please fill in all fields, including ID.")
110     return
111
112 sql = "UPDATE registration SET Name=%s, Phone=%s, Email=%s WHERE ID=%s"
113 val = (name, phone, email, id)
114

```

```

114         print(f"Executing SQL: {sql} with values {val}")
115
116     try:
117         cursor.execute(sql, val)
118         mydb.commit()
119         messagebox.showinfo("Success", "Record updated successfully!")
120     except mysql.connector.Error as err:
121         messagebox.showerror("Error", f"Error updating record: {err}")
122
123
124     def delete_data(self):
125         id = self.entry_id.get()
126
127         if not id:
128             messagebox.showerror("Error", "Please fill in the ID field.")
129             return
130
131         sql = "DELETE FROM registration WHERE ID=%s"
132         val = (id,)
133
134         print(f"Executing SQL: {sql} with values {val}")
135
136     try:
137         cursor.execute(sql, val)
138         mydb.commit()
139         messagebox.showinfo("Success", "Record deleted successfully!")
140     except mysql.connector.Error as err:
141         messagebox.showerror("Error", f"Error deleting record: {err}")

```

```

142
143     class FacilityRentalWindow(tk.Toplevel):
144         def __init__(self, main_menu):
145             tk.Toplevel.__init__(self)
146             self.main_menu = main_menu
147             self.title("Facility Management")
148             self.geometry('800x600')
149             self.configure(bg='#660000')
150
151             # Add the rest of the facility rental code here...
152             label = tk.Label(self, text='SPORT CENTRE', font=("Montserrat Medium", 28, "bold"), bg='#660000', fg='tan')
153             label.pack(ipadx=10, ipady=10)
154
155             items_text = tk.Text(self, height=12, width=55, bg='tan')
156             items_text.pack(pady=10)
157
158             items_text.insert(tk.END, "RENT PRICES!\n\n")
159             items_text.insert(tk.END, "1. Badminton Racket: RM3\n\n")
160             items_text.insert(tk.END, "2. Tennis Racket : RM3\n\n")
161             items_text.insert(tk.END, "3. Pingpong Racket : RM3\n\n")
162             items_text.insert(tk.END, "4. Bicycle : RM8\n\n")
163             items_text.insert(tk.END, "5. Netball : RM5\n\n")
164             items_text.insert(tk.END, "6. Basketball : RM5\n\n")
165             items_text.insert(tk.END, "7. Rugby : RM5\n\n")
166             items_text.insert(tk.END, "8. Soccer Ball : RM5\n\n")
167             items_text.insert(tk.END, "9. Court : RM1\n\n")
168             items_text.insert(tk.END, "10. Field : RM1\n\n")
169             items_text.configure(state='disabled')

```

```

171     frame = tk.Frame(self, bg='tan')
172     frame.pack()
173
174     rental_frame = tk.LabelFrame(frame, text="Rental", bg='tan')
175     rental_frame.grid(row=0, column=6, padx=12, pady=8)
176
177     # Dropdown court input
178     court_label = tk.Label(rental_frame, text="Court:", bg='tan')
179     court_label.pack()
180
181     self.court_var = tk.StringVar(rental_frame)
182     self.court_var.set("Select") # Set a default value
183     court_options = ["No", "Court A", "Court B", "Court C", "Court D", "Court E", "Field"]
184     court_dropdown = tk.OptionMenu(rental_frame, self.court_var, *court_options)
185     court_dropdown.config(bg='tan')
186     court_dropdown.pack()
187
188     # Dropdown items input
189     items_label = tk.Label(rental_frame, text="Items:", bg='tan')
190     items_label.pack()
191
192     self.items_var = tk.StringVar(rental_frame)
193     self.items_var.set("Select") # Set a default value
194     items_dropdown = tk.OptionMenu(rental_frame, self.items_var, "No", "Tennis Racket", "Pingpong Racket", "Bicycle", "Netball", "Basket")
195     items_dropdown.config(bg='tan')
196     items_dropdown.pack()
197
198     # Count items input
199     count_items_label = tk.Label(rental_frame, text="Count Items:", bg='tan')
200
201     # Count items input
202     count_items_label = tk.Label(rental_frame, text="Count Items:", bg='tan')
203     count_items_label.pack()
204
205     self.count_items_spinbox = tk.Spinbox(rental_frame, from_=0, to=10)
206     self.count_items_spinbox.config(bg='tan')
207     self.count_items_spinbox.pack()
208
209     # Dropdown day input
210     day_label = tk.Label(rental_frame, text="Day to Rent:", bg='tan')
211     day_label.pack()
212
213     # values for days
214     self.day_var = tk.StringVar(self) # Make day_var an instance variable
215     day_options = [f"{i} day" for i in range(0, 31)]
216     self.day_var.set(day_options[0])
217     day_dropdown = tk.OptionMenu(rental_frame, self.day_var, *day_options)
218     day_dropdown.config(bg='tan')
219     day_dropdown.pack()
220
221     # Submit button
222     submit_button = tk.Button(self, text="Submit Rental", command=self.collect_data, bg='#660000', fg='tan')
223     submit_button.pack(pady=15)
224
225     # Output Label & result
226     output_label = tk.Label(self, text="", bg='#660000', fg='FFFFFF')
227     output_label.pack()

```



```

225     def collect_data(self):
226         Court = self.court_var.get()
227         Items = self.items_var.get()
228         Count_Items = int(self.count_items_spinbox.get())
229         Day_str = self.day_var.get()
230
231         Day = int(''.join(filter(str.isdigit, Day_str)))
232
233         if not Court:
234             messagebox.showwarning("Input Error", "Please select Court.")
235             return
236
237         if not Items:
238             messagebox.showwarning("Input Error", "Please select Items.")
239             return
240
241         if Count_Items == 0:
242             messagebox.showwarning("Input Error", "Please select Count Items.")
243             return
244
245         if Day == 0:
246             messagebox.showwarning("Input Error", "Please select Day to Rent.")
247             return
248
249         # Prices for each item
250         prices = {
251             "Badminton Racket": 3,
252             "Tennis Racket": 3,
253             "Pingpong Racket": 2,

```

```

248
249         # Prices for each item
250         prices = {
251             "Badminton Racket": 3,
252             "Tennis Racket": 3,
253             "Pingpong Racket": 2,
254             "Bicycle": 8,
255             "Soccer Ball": 5,
256             "Netball": 5,
257             "Basketball": 5,
258             "Rugby": 5,
259             "No": 0,
260             "Court A,B,C,D,E,F": 1,
261             "Field": 1
262         }
263
264         day_price = 1 # Price per day
265         item_price = prices[Items]
266
267         total_price = (Count_Items * item_price) + (Day * day_price)
268
269         sql = "INSERT INTO rental (Court, Items, Count_Items, Day, Total_Price) VALUES (%s, %s, %s, %s, %s)"
270         val = (Court, Items, Count_Items, Day, total_price)
271         print(f"Executing SQL: {sql} with values {val}")
272         cursor.execute(sql, val)
273         mydb.commit()
274
275         # confirmation message
276         messagebox.showinfo("Confirmation", "Your rental details submitted successfully!")

```

```

277
278     # bill window
279     self.show_bill(Court, Items, Count_Items, Day, total_price)
280
281     def show_bill(court, items, count_items, day, total_price):
282         bill_window = tk.Toplevel()
283         bill_window.title("Rental Bill")
284
285         bill_text = tk.Text(bill_window, height=10, width=30,)
286         bill_text.pack(pady=10)
287
288         bill_text.insert(tk.END, "Rental Details:\n\n")
289         bill_text.insert(tk.END, f"Court: {court}\n")
290         bill_text.insert(tk.END, f"Items: {items}\n")
291         bill_text.insert(tk.END, f"Count Items: {count_items}\n")
292         bill_text.insert(tk.END, f"Day: {day}\n")
293         bill_text.insert(tk.END, f"Total Price: RM {total_price}\n")
294
295     class DamageReportingWindow(tk.Toplevel):
296     def __init__(self, main_menu):
297         tk.Toplevel.__init__(self)
298         self.main_menu = main_menu
299         self.title("Damage Reporting")
300         self.geometry('600x600')
301         self.configure(bg='#660000')
302
303         prices_text = tk.Text(self, height=18, width=45, bg='tan')
304         prices_text.pack(pady=20)

```

```

302
303         prices_text = tk.Text(self, height=18, width=45, bg='tan')
304         prices_text.pack(pady=20)
305
306         prices_text.insert(tk.END, "Item & price:\n\n")
307         prices_text.insert(tk.END, "badminton racket: RM20\n\n")
308         prices_text.insert(tk.END, "tennis racket: RM30\n\n")
309         prices_text.insert(tk.END, "pingpong racket: RM20\n\n")
310         prices_text.insert(tk.END, "bicycle: RM200\n\n")
311         prices_text.insert(tk.END, "soccer ball: RM40\n\n")
312         prices_text.insert(tk.END, "netball: RM40\n\n")
313         prices_text.insert(tk.END, "basketball: RM40\n\n")
314         prices_text.insert(tk.END, "rugby: RM50\n\n")
315         prices_text.configure(state='disabled')
316
317         # Item Type Dropdown
318         self.item_var = tk.StringVar(self)
319         self.item_var.set("Select Item")
320         trip_dropdown = tk.OptionMenu(self, self.item_var, "badminton racket", "tennis racket", "pingpong racket", "bicycle", "soccer ball")
321         trip_dropdown.config(bg='tan', fg='black')
322         trip_dropdown.pack(pady=10)
323
324         # Total damaged item spinbox
325         item_label = tk.Label(self, text="Total damage:", bg='tan', fg='black', font=("Georgia", 8))
326         item_label.pack()
327         self.damaged_item_entry = tk.Spinbox(self, from_=0, to=100, bg='tan', fg='black', font=("Georgia", 8) )
328         self.damaged_item_entry.pack(pady=10)
329

```

```

330 # Save Button
331 save_button = tk.Button(self, text="Calculate", command=self.collect_data, bg='tan', fg='black', font=("Georgia", 8))
332 save_button.pack(pady=10)
333
334 # Output
335 label = tk.Label(self, text='Total price:', bg='tan', fg='black', font=("Georgia", 8))
336 label.pack(ipadx=10, ipady=10)
337 self.output_label = tk.Label(self, text="", bg='tan', fg='black', font=("Georgia", 8))
338 self.output_label.pack()
339
340 def collect_data(self):
341     global Total_Price
342     Item = self.item_var.get()
343     Total_Damaged = int(self.damaged_item_entry.get())
344
345     # prices dictionary
346     prices = {
347         "badminton racket": 20,
348         "tennis racket": 30,
349         "pingpong racket": 20,
350         "bicycle": 200,
351         "soccer ball": 40,
352         "netball": 40,
353         "basketball": 40,
354         "rugby": 50,
355     }
356
357     Item_Price = prices[Item]

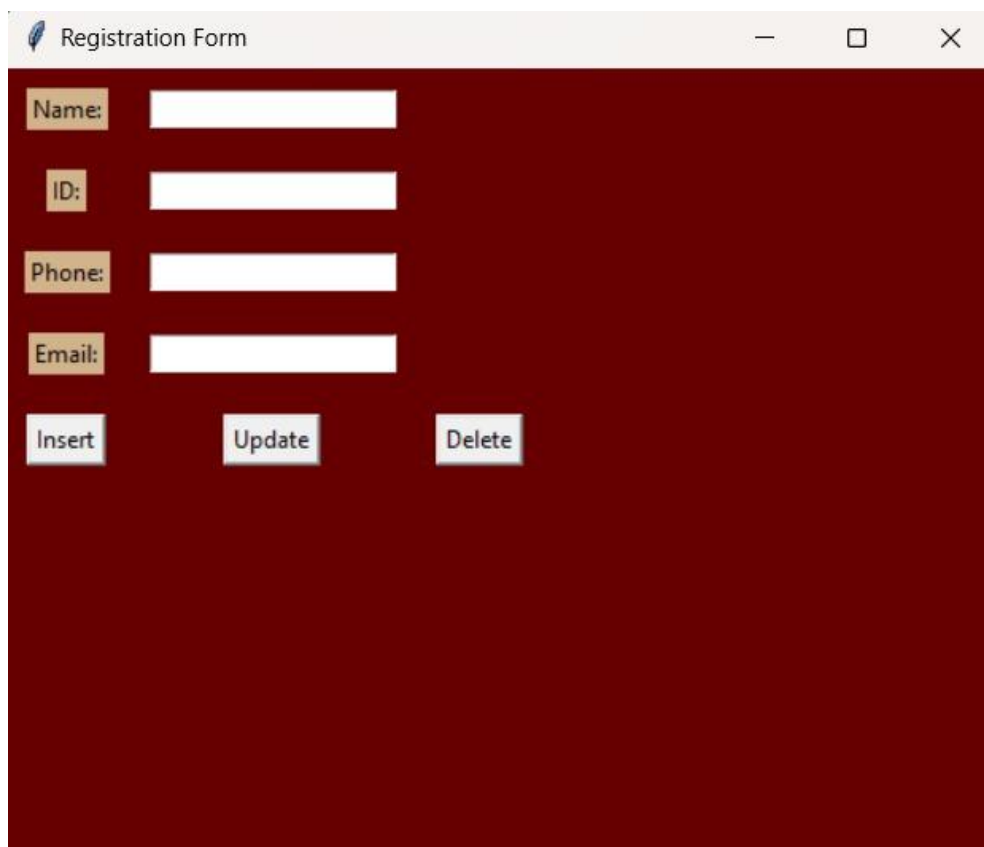
```

```

352         "netball": 40,
353         "basketball": 40,
354         "rugby": 50,
355     }
356
357     Item_Price = prices[Item]
358     Total_Price = Total_Damaged * Item_Price
359
360     sql = "INSERT INTO `damage` (Item, Total_Damaged, Item_Price, Total_Price) VALUES (%s, %s, %s, %s)"
361     val = (Item, Total_Damaged, Item_Price, Total_Price)
362     print(f"Executing SQL: {sql} with values {val}")
363     cursor.execute(sql, val)
364     mydb.commit()
365
366     self.output_label.config(text=f"Item: {Item}, Total damage: {Total_Damaged}\n\n Total Price: RM{Total_Price}")
367
368 if __name__ == "__main__":
369     app = MainMenu()
370     app.mainloop()

```

## 4.0 GUI



Facility Management

SPORT CENTRE

RENT PRICES!

1. Badminton Racket: RM3

2. Tennis Racket : RM3

3. Pingpong Racket : RM3

4. Bicycle : RM8

5. Netball : RM5

Rental

Court:

Select

Items:

Select

Count Items:

0

Day to Rent:

0 day

Submit Rental

Damage Reporting

Item & price:

badminton racket: RM20

tennis racket: RM30

pingpong racket: RM20

bicycle: RM200

soccer ball: RM40

netball: RM40

basketball: RM40

rugby: RM50

Select Item

Total damage:

0

Calculate

Total price:

## 5.0 DATABASE

The screenshot shows the phpMyAdmin interface for the 'sport\_centre' database. The left sidebar displays a tree view of databases, with 'sport\_centre' selected. The main panel shows the 'Structure' tab for the 'sport\_centre' database. It lists three tables: 'damage', 'registration', and 'rental'. Each table has a 'Browse' button and a 'Structure' button. Below the table list, there is a 'Create new table' section with a 'Table name' field and a 'Number of columns' field set to 4. A 'Console' tab is visible at the bottom.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> damage	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	3	InnoDB	utf8mb4_general_ci	16.0 K	B
<input type="checkbox"/> registration	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	3	InnoDB	utf8mb4_general_ci	16.0 K	B
<input type="checkbox"/> rental	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	3	InnoDB	utf8mb4_general_ci	16.0 K	B
3 tables Sum		9	InnoDB	utf8mb4_general_ci	48.0 K	B

The screenshot shows the phpMyAdmin interface for the 'registration' table. The left sidebar displays a tree view of databases, with 'sport\_centre' selected. The main panel shows the 'Browse' tab for the 'registration' table. It displays a message: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, it shows 'Showing rows 0 - 2 (3 total, Query took 0.0008 seconds.)'. The query 'SELECT \* FROM `registration`' is displayed. Below the query, there are buttons for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. There are also buttons for 'Show all', 'Number of rows' (set to 25), and 'Filter rows' (Search this table). Below these buttons, there is a table with the following data:

Name	ID	Phone	Email
hawa	0	172956188	hawa12@gmail.com
khuz	0	1123035342	khuz28@gmail.com
liya	0	187643259	00liya@gmail.com

Below the table, there are buttons for 'Show all', 'Number of rows' (set to 25), and 'Filter rows' (Search this table). At the bottom, there is a 'Query results operations' section with buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'. A 'Console' tab is visible at the bottom.

phpMyAdmin

Recent Favorites

- New
- gp\_ess
- holiday\_package
- information\_schema
- mysql
- night\_movie
- performance\_schema
- phpmyadmin
- sport\_centre
  - New
  - damage
  - rental
  - user
- test
- user\_data

Server: 127.0.0.1 » Database: sport\_centre » Table: rental

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds)

SELECT \* FROM `rental`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all Number of rows: 25 Filter rows: Search this table

Extra options

Court	Items	Count_Items	Day	Total_Price
Court A	Netball	5	10	35
No	Bicycle	2	5	21
Field	Rugby	3	20	35

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

localhost/phpmyadmin/index.php?route=/sql&pos=0&db=sport\_centre&table=ren...

phpMyAdmin

Recent Favorites

- New
- gp\_ess
- holiday\_package
- information\_schema
- mysql
- night\_movie
- performance\_schema
- phpmyadmin
- sport\_centre
  - New
  - damage
  - rental
  - user
- test
- user\_data

Server: 127.0.0.1 » Database: sport\_centre » Table: damage

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds)

SELECT \* FROM `damage`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all Number of rows: 25 Filter rows: Search this table

Extra options

Item	Total_Damaged	Item_Price	Total_Price
bicycle	2	200	400
netball	1	40	40
rugby	2	50	100

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Console

## **6.0 CONCLUSION**

In conclusion, this system is straightforward, so it is easy to use and implement in the management. The form and attributes can be changed according to the institutions' needs and requirements. In brief, it is adaptable and flexible to meet the needs of individuals or organizations. Besides, the design and implementation are also changeable, depending on the preferences. Hence, the simple features facilitate the implementation of the system.

In addition, the output will be displayed in the form to inform the users about the information and data they have inserted. If any error occurs, users could change the data. This feature would make an easy correction to ensure the data is accurate. The information recorded would be used to confirm the booking of the item or court so that there would be no unauthorized users. Similarly, reporting damaged items needs to be accurate to ensure the broken item is being separated. Thus ensuring the safety of the users from being hurt when using the equipment.

At last, the implementation that are in this system not only is modernizes and streamlines management processes but also accounted to the overall success of the Sport Centre. By making the adaptibility, user-friendly, and accurate data management as a priority, this system become a valuable tool for enhancing both operational efficiency and user satisfaction.