



**UNIVERSITI TEKNOLOGI MARA (UITM)**

**CAWANGAN KEDAH KAMPUS SUNGAI PETANI**

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS**

**DIPLOMA IN LIBRARY INFORMATICS**

**(CDIM144 3B)**

**PROGRAMMING FOR LIBRARIES**

**(IML208)**

**INDIVIDUAL PROJECT**

**PREPARED BY:**

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**SUBMISSION WEEK:**

**WEEK 10**

ASSIGNMENT 1:  
INDIVIDUAL PROJECT

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DIPLOMA IN LIBRARY INFORMATICS  
FACULTY OF INFORMATION MANAGEMENT  
UNIVERSITI TEKNOLOGI MARA (UITM) CAWANGAN KEDAH  
WEEK 10

## ACKNOWLEDGEMENT

Assalamualaikum w.b.t

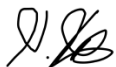
Alhamdulillah, I would like to thank God for giving me the strength to complete the assignment smoothly. And because of his grace, I am encouraged to continue the assignment until I succeed.

I, as a part of the students from Library Informatics wants to convey my sincere gratitude to Encik Mohd Firdaus Mohd Helmi my lecturer for his undivided attention and infinite help in completing this assignment. Without his guidance, I could not even finish this assignment completely all by myself. Furthermore, with this given assignment, I could explore the various functions and sites of online library services even better. With this knowledge, it is easier for me to gain much access for the purpose of completing many more assignments ahead.

Apart from that, I would like to thank all my beloved classmates for helping me without any hesitation throughout this assignment. Their help in answering the questions in the group chat truly gives clarity to all my doubts and issues.

Last but not least, I would like to thank my family for their continuous support until I accomplish this assignment. With their support and motivation, I am determined to not give up halfway and finish this assignment easily.

Sincerely,



NAME: NURUL NAJWA BINTI PIHER

ID: 2023888548

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i.



## 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:

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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.
- 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: NURUL NAJWA BINTI PIHER

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Faculty / Campus: COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

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

Bahagian Pentaksiran dan Penilaian Akademik 2021

## TABLE OF CONTENT

CONTENT	PAGES
ACKNOWLEDGEMENT	i
STUDENT PLEDGE	ii
TABLE OF CONTENT	iii
1.0 PROJECT NAME, FILE NAME AND PROMPT DATA	1
2.0 FUNCTION	2 - 5
3.0 CONDITIONAL STATEMENT	6
4.0 GUI	7
5.0 RESULT	8
6.0 STRENGTH	9 - 10
7.0 KAIZEN (ROOM FOR IMPROVEMENT)	11 -12
REFERENCE	13

## **1.0 PROJECT NAME, FILE NAME AND PROMPT DATA**

Project Name: Event Booking System

File name: eventbooking.py

Prompt Data:

- i. Event name:  
Glow in the dark
- ii. Event date:  
12/12/2024
- iii. Seats available:  
100
- iv. User name:  
Miss Anna
- v. Seats to book:  
5

## 2.0 FUNCTION

- i. Create data

```
32 # Add a new event
33 def add_event():
34     event_name = entry_event_name.get()
35     event_date = entry_event_date.get()
36     seats_available = entry_seats_available.get()
37
38     if event_name and event_date and seats_available.isdigit():
39         seats_available = int(seats_available)
40         c.execute("INSERT INTO events (name, date, seats_available) VALUES (?, ?, ?)",
41                 (event_name, event_date, seats_available))
42         conn.commit()
43         entry_event_name.delete(0, tk.END)
44         entry_event_date.delete(0, tk.END)
45         entry_seats_available.delete(0, tk.END)
46         display_events()
47         messagebox.showinfo("Success", "Event added successfully!")
48
```

Figure 1: Coding to create a data

The screenshot shows a GUI application with a light gray background. At the top, there are three input fields labeled "Event Name:", "Event Date:", and "Seats Available:". Below these fields are three buttons: "Add Event", "Update Event", and "Delete Event". Underneath the buttons is a text area containing the text "8: Glow in the dark - 12/12/2024 - 100 seats available". At the bottom of the window, there are two more input fields labeled "Your Name:" and "Seats to Book:". Below these fields are two buttons: "Book Tickets" and "Cancel Booking".

Figure 2: Event has been created

ii. Read data

```
49 # Display all events
50 def display_events():
51     listbox_events.delete(0, tk.END)
52     c.execute("SELECT * FROM events")
53     rows = c.fetchall()
54     for row in rows:
55         listbox_events.insert(tk.END, f"{row[0]}: {row[1]} - {row[2]} - {row[3]} seats available")
56
```

Figure 3: Coding to display event

The image shows a Tkinter window with a light gray background. It contains several input fields and buttons. At the top, there are three input fields labeled 'Event Name:', 'Event Date:', and 'Seats Available:'. Below these are three buttons: 'Add Event', 'Update Event', and 'Delete Event'. In the center, there is a listbox containing one item: '8: Glow in the dark - 12/12/2024 - 95 seats available'. Below the listbox are two more input fields labeled 'Your Name:' and 'Seats to Book:'. At the bottom, there are two buttons: 'Book Tickets' and 'Cancel Booking'.

Figure 4: Event is displayed



iii. Update data

```
57 # Update event details
58 def update_event():
59     selected_event = listbox_events.curselection()
60     if selected_event:
61         event_id = listbox_events.get(selected_event).split(":")[0]
62         new_seats = entry_seats_available.get()
63
64         if new_seats.isdigit():
65             c.execute("UPDATE events SET seats_available = ? WHERE id = ?",
66                       (int(new_seats), event_id))
67             conn.commit()
68             entry_seats_available.delete(0, tk.END)
69             display_events()
70             messagebox.showinfo("Success", "Event updated successfully!")
71
```

Figure 5: Coding to update data

The image shows a GUI application with a light gray background. At the top, there are three input fields labeled "Event Name:", "Event Date:", and "Seats Available:". Below these fields are three buttons: "Add Event", "Update Event", and "Delete Event". A listbox is positioned below the buttons, displaying the text "8: Glow in the dark - 12/12/2024 - 80 seats available". At the bottom of the window, there are two more input fields labeled "Your Name:" and "Seats to Book:". Below these fields are two buttons: "Book Tickets" and "Cancel Booking".

Figure 6: Seats available have been updated

iv. Delete existing data

```
72 # Delete an event
73 def delete_event():
74     selected_event = listbox_events.curselection()
75     if selected_event:
76         event_id = listbox_events.get(selected_event).split(":")[0]
77         c.execute("DELETE FROM events WHERE id = ?", (event_id,))
78         conn.commit()
79         display_events()
80         messagebox.showinfo("Success", "Event deleted successfully!")
81
```

Figure 7: Coding to delete existing data

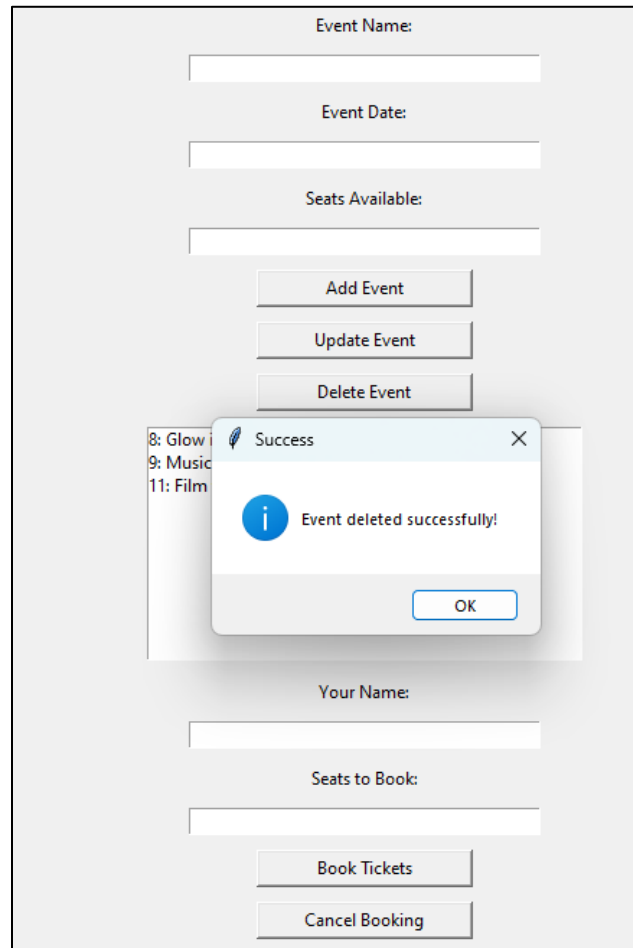


Figure 8: An event has been deleted

### 3.0 CONDITIONAL STATEMENT

Conditional statement: Yes.

The "if" statement in this code is important to ensure that specific requirements are met before performing an operation such as booking a ticket.

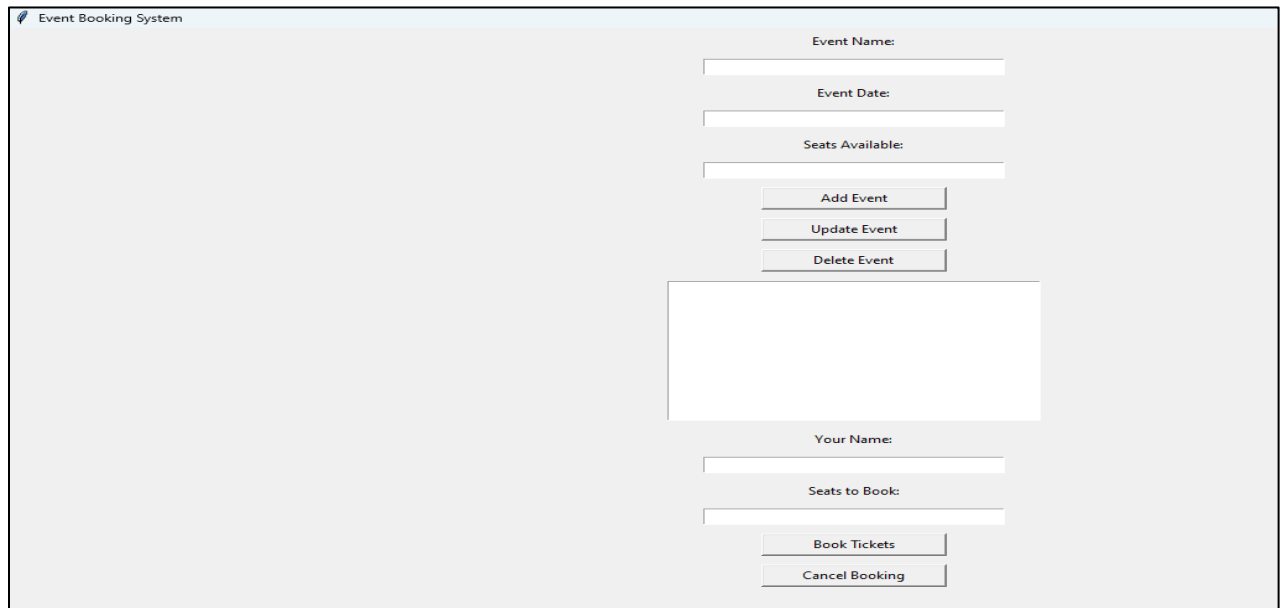
- 1) The first "if": Ensures that the event has been selected before attempting to purchase a ticket.
- 2) Second "if": Verify that the user put the seat number and real name.
- 3) The third "if": Verify that there are enough seats before completing the reservation.

```
82 # Book tickets
83 def book_tickets():
84     selected_event = listbox_events.curselection()
85     if selected_event:
86         event_id = listbox_events.get(selected_event).split(":")[0]
87         user_name = entry_user_name.get()
88         seats_to_book = entry_seats_to_book.get()
89
90         if user_name and seats_to_book.isdigit():
91             seats_to_book = int(seats_to_book)
92
93             c.execute("SELECT seats_available FROM events WHERE id = ?", (event_id,))
94             available_seats = c.fetchone()[0]
95
96             if seats_to_book <= available_seats:
97                 c.execute("INSERT INTO bookings (event_id, name, seats_booked) VALUES (?, ?, ?)",
98                     (event_id, user_name, seats_to_book))
99                 c.execute("UPDATE events SET seats_available = ? WHERE id = ?",
100                     (available_seats - seats_to_book, event_id))
101                 conn.commit()
102                 entry_user_name.delete(0, tk.END)
103                 entry_seats_to_book.delete(0, tk.END)
104                 display_events()
105                 messagebox.showinfo("Success", "Tickets booked successfully!")
106
```

Figure 9: Coding to book a tickets

## 4.0 GUI

Yes



The screenshot displays the 'Event Booking System' GUI. It features a light blue header bar with the system name. The main interface is divided into two primary sections. The upper section, titled 'Event Management', includes input fields for 'Event Name:', 'Event Date:', and 'Seats Available:', followed by three buttons: 'Add Event', 'Update Event', and 'Delete Event'. Below these is a large, empty white rectangular box. The lower section, titled 'Booking', contains input fields for 'Your Name:' and 'Seats to Book:', followed by two buttons: 'Book Tickets' and 'Cancel Booking'.

Event Booking System

Event Name:

Event Date:

Seats Available:

Add Event

Update Event

Delete Event

Your Name:

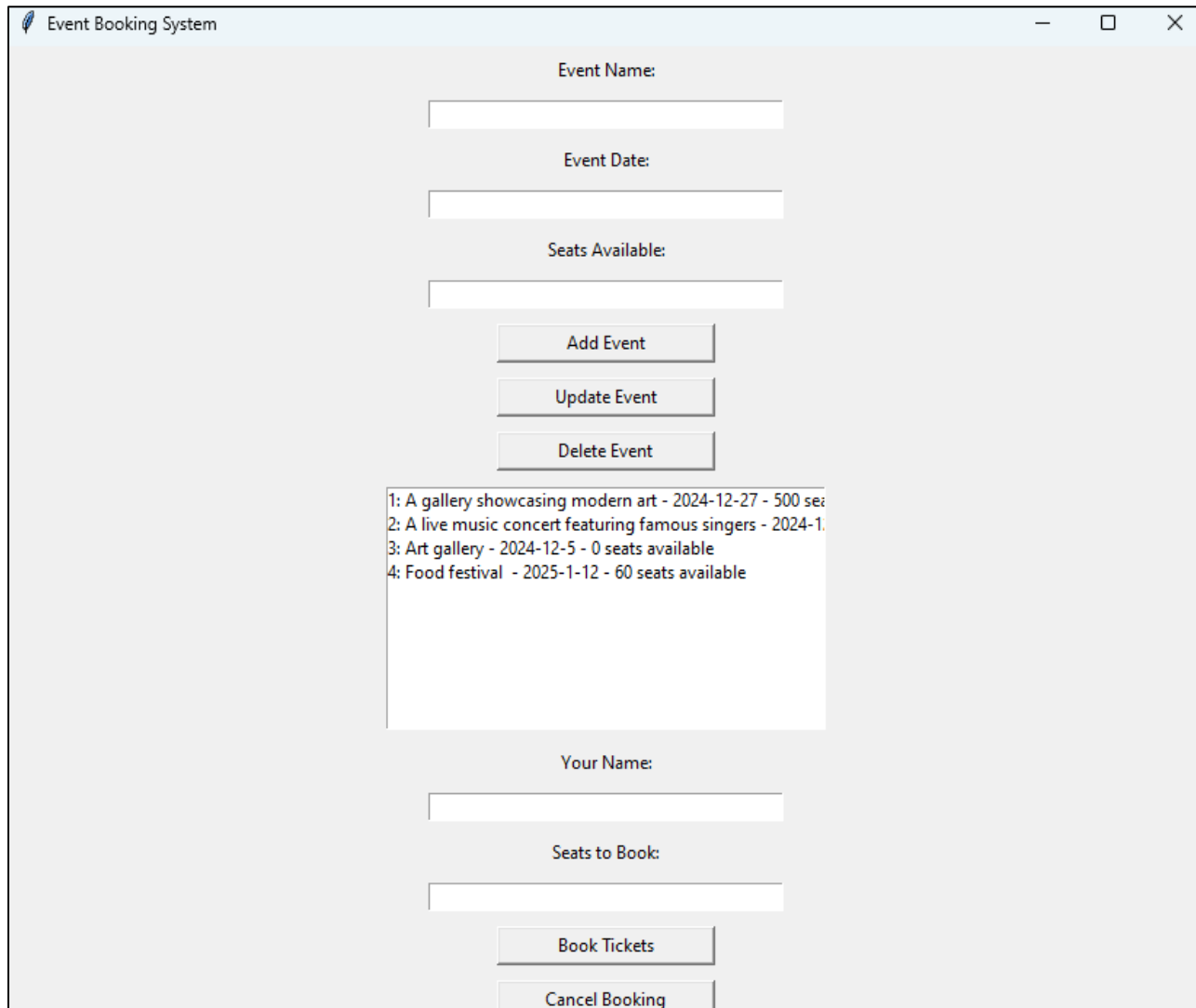
Seats to Book:

Book Tickets

Cancel Booking

Figure 10: GUI of Event Booking System

## 5.0 RESULT



The screenshot displays the 'Event Booking System' window. It features a central form with three input fields: 'Event Name:', 'Event Date:', and 'Seats Available:'. Below these fields are three buttons: 'Add Event', 'Update Event', and 'Delete Event'. A text box below the buttons contains a list of events:

- 1: A gallery showcasing modern art - 2024-12-27 - 500 seats available
- 2: A live music concert featuring famous singers - 2024-12-28 - 1000 seats available
- 3: Art gallery - 2024-12-5 - 0 seats available
- 4: Food festival - 2025-1-12 - 60 seats available

Below the text box are two more input fields: 'Your Name:' and 'Seats to Book:'. At the bottom are two buttons: 'Book Tickets' and 'Cancel Booking'.

Figure 11: Result of Event Booking System

## **6.0 STRENGTH**

### **Easier management**

It is said to have easier management because this system acts as a center where event organizers can manage all event elements such as budget, schedule, speakers, venue, registration payment, reporting and so on. This event booking system also helps event managers keep track of all event elements to ensure that the event to be held runs smoothly. As a result, organizing events becomes easier by using this system than managing them manually.

### **Saves time**

Event organizers can save their time by using an event booking system when they want to host an event. This is because this software allows event organizers to coordinate all processes starting from registration tracking to booking, payment processing and further email monitoring. In addition, it helps to ensure that event organizers are satisfied with the organized event as it can provide a great experience to the attendees and guests of the event while also getting a positive return on investment.

**Cuts cost**

This system also helps organizers reduce budget costs. It helps track expenses and analyze them based on the event budget with a user-friendly interface and reporting that allows event organizers to visualize them to achieve maximum return on investment. As a result, by using an event management platform, organizers can always see where or when money comes in and out of the project.

**Improves data collection**

The system uses data protection to manage personal data to ensure that each event organizer complies with current regulations. It further simplifies and streamlines the process by keeping multiple logs of participant details and preferences. For example, customers who have booked tickets and who have paid for their tickets. As a result, it makes it easy to capture leads during events with badge scanning to allow personalized email delivery using segmented email lists.

## **7.0 KAIZEN (ROOM FOR IMPROVEMENT)**

### **Ensure secure payment processing**

To increase the improvement of the event booking system, the online event booking system needs to offer secure payment processing. This is because it is important to increase online bookings and provide a positive customer experience when payment is made. For example, displaying any relevant badges and security systems. As a result, customers will not hesitate to make any bookings and subsequently increase ticket sales.

### **Conversion-Optimized**

Conversion optimization can be done by including clear and attractive reservations throughout the website. Next, show the value of your place by showing what's included. In addition, the system can be improved with offers special offers and promotions. Event organizers can also display booking benefits on your platform such as refund policies and finally add additional information that customers want to know before booking. This is done to attract customers to book in your event booking system.



### **Use efficient booking software**

Use efficient booking software by setting up a booking engine that allows you to take event bookings and ensure that the software can play a role in how you shape the customer journey. This is to launch their journey. In addition, the booking solution should also provide a convenient experience for customers by giving them access to all the information needed to book a place quickly. As a result, it provides access to a variety of event planning tools to improve the event management process and facilitate online booking for all customers.

### **Set up automated reminders**

Event booking systems can be improved by using event automation. The software will send automatic event reminders to customers. The purpose is to remind customers that their event date is coming up or to give them an incentive to make the next payment installment. As a result, it helps the system become more organized.

## REFERENCE

How to create a better event booking experience for your venue. (2023, February 27). perfect venue. Retrieved December 6, 2024, from <https://www.perfectvenue.com/post/event-bookings-experience>

Royal, N. (2023, January 09). 6 benefits of event management platforms. Run.events. <https://run.events/blog/benefits-of-event-management-platforms/>