



UNIVERSITI TEKNOLOGI MARA
(UiTM) KEDAH, KAMPUS SUNGAI PETANI

SCHOOL OF INFORMATION SCIENCE
COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

DIPLOMA IN LIBRARY INFORMATICS
[CDIM144]

PROGRAMMING FOR LIBRARIES [IML208]

INDIVIDUAL PROJECT: COMPUTER INTERFACE

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PREPARED FOR:
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SUBMISSION DATE:
18 DECEMBER 2024

COMPUTER INTERFACE: CONCERT TICKETS BOOKING SYSTEMS

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ACKNOWLEDGEMENT

Bismillah

Assalamualaikum W.B.T

Alhamdulillah, after all, I am grateful to Allah SWT because of His nature in Al-Rahman, I could finish my assignment.

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Lastly, I want to thank everyone who has contributed their self in giving me continuous moral support to the completion of this task, whether mentioned or not.

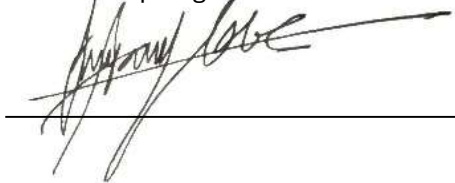


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- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice, or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration 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 behaviour 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: NUR IMAN SHAKIRAH BINTI NUR AFFENDI

Matric Number: 2023825284

Course Code: IML208

Programme code: IM144

Faculty / Campus: UITM SUNGAI PETANI

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

Project Name: Concert Tickets Booking System

File name: #Concert Ticket Booking System.py

Prompt Data :

- i. Name:
User's name for booking records.
- ii. Age:
User's age to ensure eligibility (18+ only).
- iii. Ticket Type:
Users can choose between K-pop or Western concert tickets.
- iv. Price:
\$120 for K-pop, \$100 for Western
- v. Concert Date:
User entered the concert date.

Below is the python statement:-

```
23     name = input("Enter your name: ")
24     age = int(input("Enter your age: "))
25     if age < 18:
26         print("You must be 18 or older to book a ticket.\n")
27         return
28     ticket_type = input("Enter ticket type (K-pop/Western): ").lower()
29     price = 120 if ticket_type == 'k-pop' else 100
30     concert_date = input("Enter concert date (YYYY-MM-DD): ")
31     seating_chart[row][seat] = 'B'
32     bookings.append({
33         "Name": name, "Age": age, "Type": ticket_type,
34         "Price": price, "Date": concert_date, "Row": row + 1, "Seat": seat + 1
```

Figure 1: Python Statement Prompt

Function :

i. Create data

Users can book tickets by providing their name, age, concert date, and ticket type. The system saves the ticket details. Below is an example:-

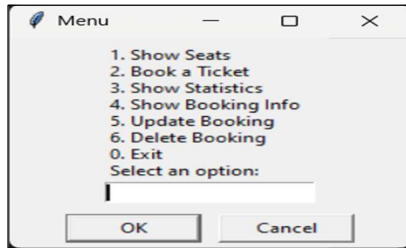


Figure 2

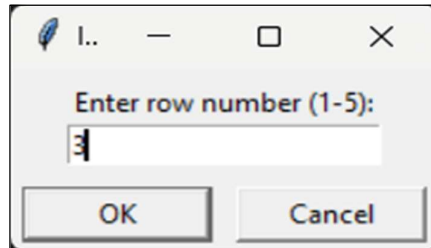


Figure 3

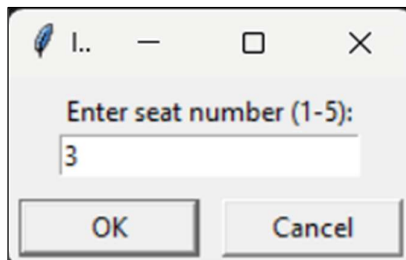


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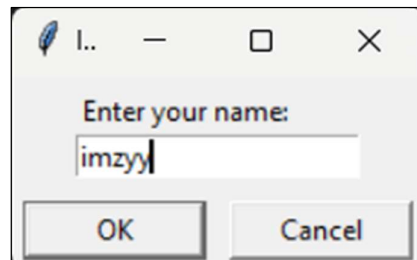


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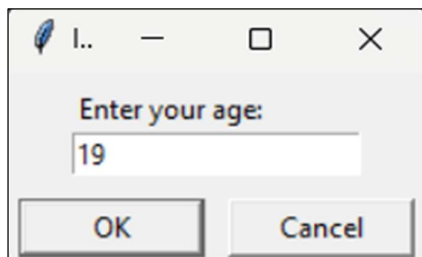


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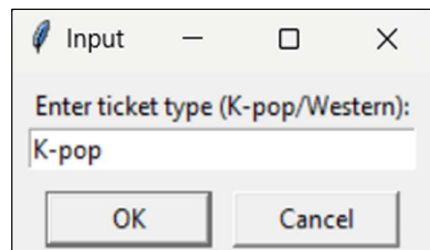


Figure 7

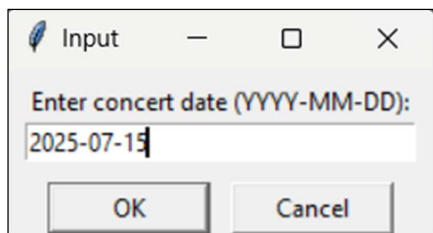


Figure 8

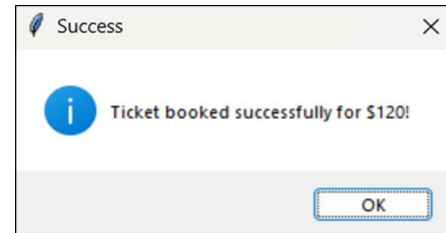


Figure 9

ii. **Read data**

User can view all booked tickets statistics such as the total tickets sold and total revenue.

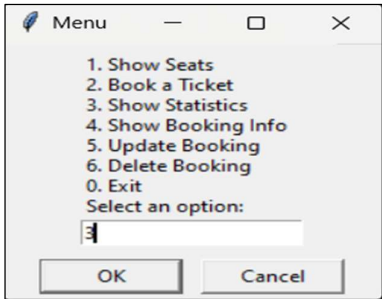


Figure 10

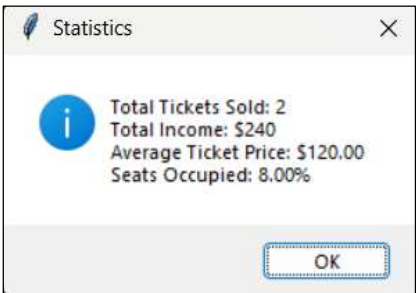


Figure 11

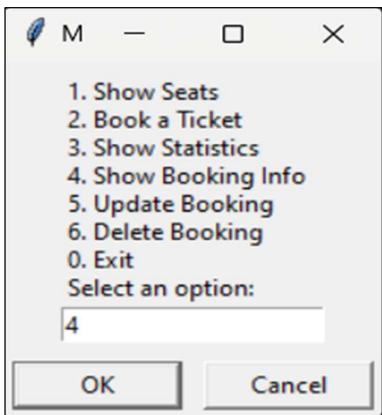


Figure 12

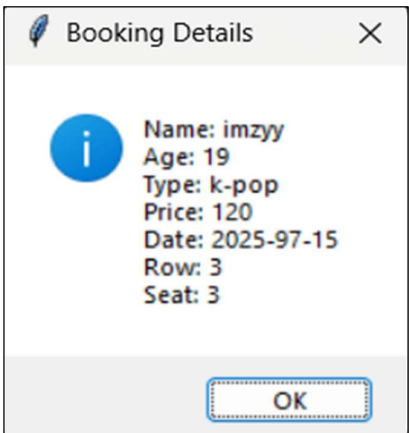


Figure 13: Before Update

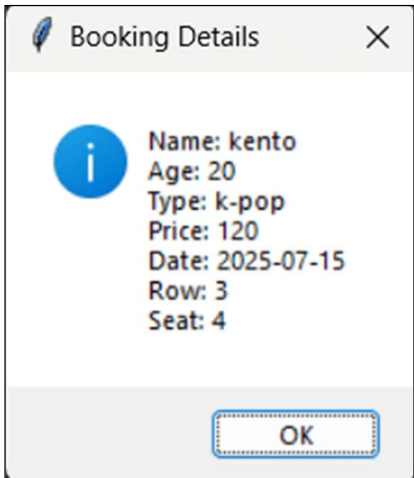


Figure 14

iii. Update data

User can change their row number, seat number, name, age and ticket type of their preferences. Below are the options for updating user's data information.

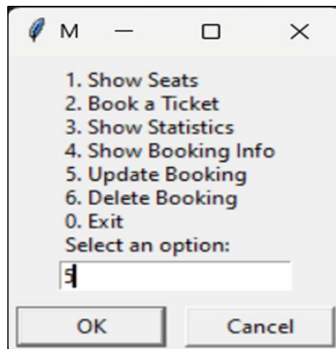


Figure 15

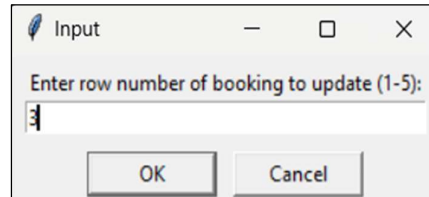


Figure 16

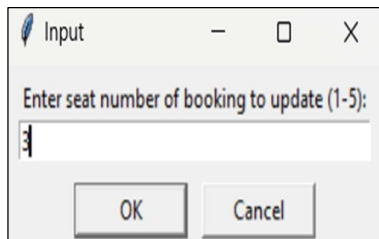


Figure 17

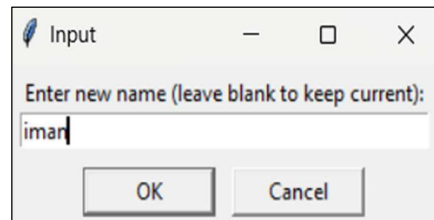


Figure 18

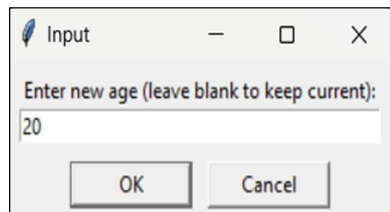


Figure 19

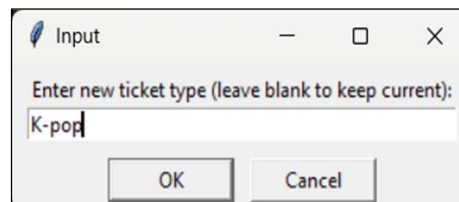


Figure 20

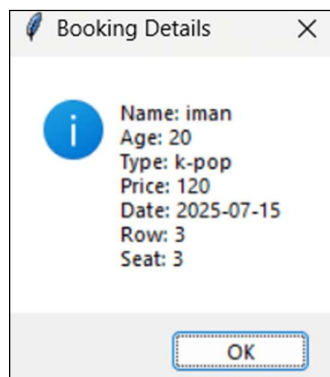


Figure 21:After Update

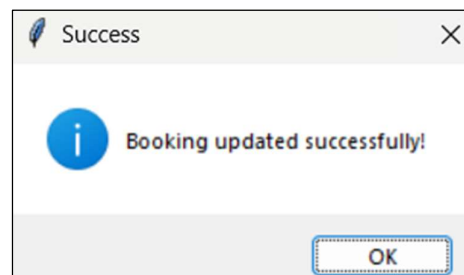


Figure 22

iv. Delete existing data

User can delete their information themselves.

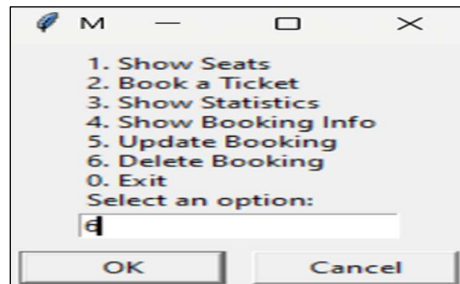


Figure 23

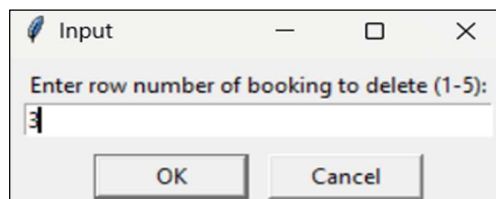


Figure 24

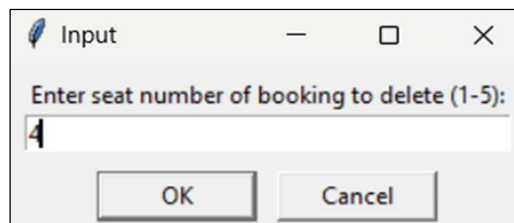


Figure 25

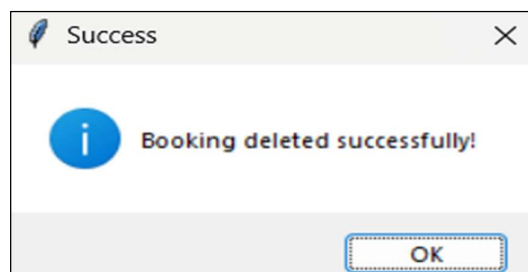


Figure 26

Conditional Statement : Yes

1. Eligibility check: System ensures that users are 18 years or older using *if-else* structure:

```
25         if age < 18:
26             print("You must be 18 or older to book a ticket.\n")
27             return
```

Figure 27

2. Concert ticket type: System ensures user select either K-Pop or Western option using *if, else* structure:

```
28     ticket_type = input("Enter ticket type (K-pop/Western):").lower()
29     price = 120 if ticket_type == 'k-pop' else 100
```

Figure 28

3. Menu navigation: User input determine the menu options with *if-elif, else* structure:

```
105 # Menu
106 while True:
107     print("1. Show Seats\n2. Book a Ticket\n3. Show Statistics\n4. Show Booking Info\n5. Update Booking\n6. Delete Booking\n0. Exit")
108     choice = input("Select an option: ")
109     if choice == '1':
110         display_seats()
111     elif choice == '2':
112         book_ticket()
113     elif choice == '3':
114         show_statistics()
115     elif choice == '4':
116         show_booking()
117     elif choice == '5':
118         update_booking()
119     elif choice == '6':
120         delete_booking()
121     elif choice == '0':
122         print("Goodbye!")
123         break
124     else:
125         print("Invalid choice. Try again.\n")
```

Figure 29

GUI : Yes

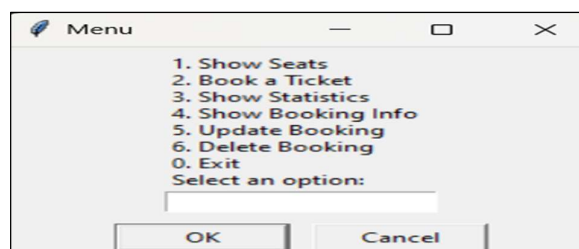
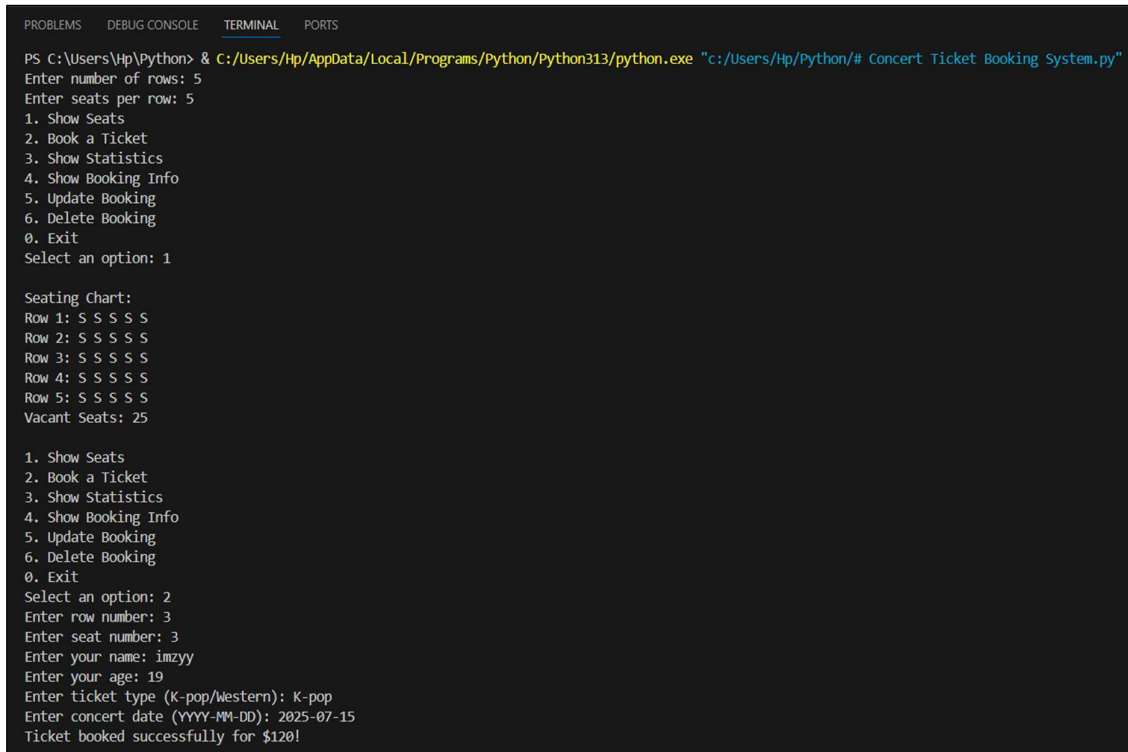


Figure 30

Result :

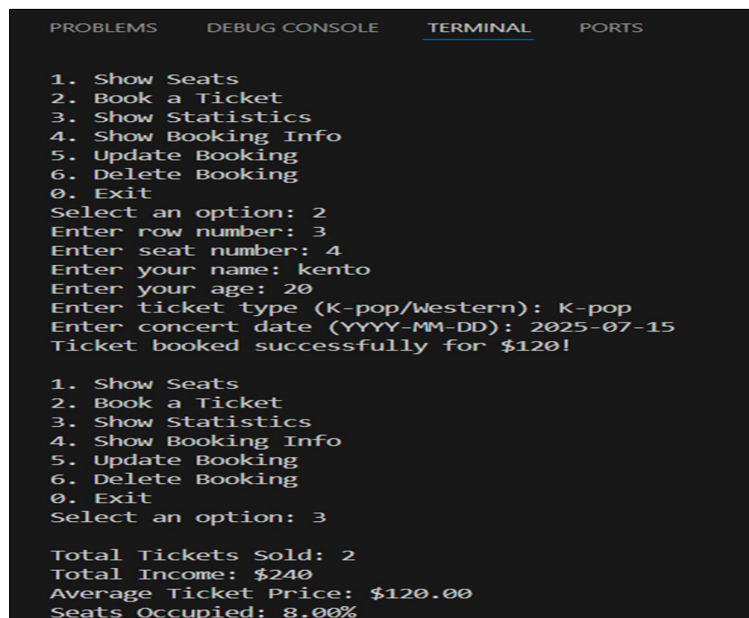


```
PS C:\Users\Hp\Python> & C:/Users/Hp/AppData/Local/Programs/Python/Python313/python.exe "c:/Users/Hp/Python/# Concert Ticket Booking System.py"
Enter number of rows: 5
Enter seats per row: 5
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 1

Seating Chart:
Row 1: S S S S S
Row 2: S S S S S
Row 3: S S S S S
Row 4: S S S S S
Row 5: S S S S S
Vacant Seats: 25

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 2
Enter row number: 3
Enter seat number: 3
Enter your name: imzyy
Enter your age: 19
Enter ticket type (K-pop/Western): K-pop
Enter concert date (YYYY-MM-DD): 2025-07-15
Ticket booked successfully for $120!
```

Figure 31



```
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 2
Enter row number: 3
Enter seat number: 4
Enter your name: kento
Enter your age: 20
Enter ticket type (K-pop/Western): K-pop
Enter concert date (YYYY-MM-DD): 2025-07-15
Ticket booked successfully for $120!

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 3

Total Tickets Sold: 2
Total Income: $240
Average Ticket Price: $120.00
Seats Occupied: 8.00%
```

Figure 32

```
PROBLEMS  DEBUG CONSOLE  TERMINAL  PORTS

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 4
Enter row number: 3
Enter seat number: 3

Booking Details:
Name: imzyy
Age: 19
Type: k-pop
Price: 120
Date: 2025-07-15
Row: 3
Seat: 3
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 4
Enter row number: 3
Enter seat number: 4
```

Figure 33

```
PROBLEMS  DEBUG CONSOLE  TERMINAL  PORTS

Booking Details:
Name: kento
Age: 20
Type: k-pop
Price: 120
Date: 2025-07-15
Row: 3
Seat: 4
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 5
Enter row number of booking to update: 3
Enter seat number of booking to update: 3
Enter new name (leave blank to keep current): iman
Enter new age (leave blank to keep current): 20
Enter new ticket type (leave blank to keep current): K-pop
Booking updated successfully!

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 4
Enter row number: 3
Enter seat number: 3
```

Figure 34

```
PROBLEMS    DEBUG CONSOLE    TERMINAL    PORTS

Booking Details:
Name: iman
Age: 20
Type: k-pop
Price: 120
Date: 2025-07-15
Row: 3
Seat: 3
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 6
Enter row number of booking to delete: 3
Enter seat number of booking to delete: 4
Booking deleted successfully!

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 4
Enter row number: 3
Enter seat number: 4
Enter row number: 3
Enter row number: 3
Enter seat number: 4
This seat is vacant.
```

Figure 35

```
1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 3

Total Tickets Sold: 1
Total Income: $120
Average Ticket Price: $120.00
Seats Occupied: 4.00%

1. Show Seats
2. Book a Ticket
3. Show Statistics
4. Show Booking Info
5. Update Booking
6. Delete Booking
0. Exit
Select an option: 0
Goodbye!
PS C:\Users\Hp\Python> █
```

Figure 36

Strength:

1. Simplicity: The system is user-friendly, with a simple graphic user interface.
2. Essential: The system features include functions, such as booking tickets and users can view booking statistics.
3. Time-saving: Users do not need to stand in line to book tickets, instead, they could just buy it online.

Kaizen (Room for improvement)**1. Making the System Easier to Use**

Adding a step-by-step guide or simple pop-ups can help first-time users understand how to use the system. Filters like date, price range, seating type, or artist should also be added to the search function. This will make it faster and easier to find the right events.

2. Adding Useful Features

A wish list or reminder option would help users keep track of events they are interested in and book later. A seat map showing available spots would make it easier to pick the perfect seat. Real-time stats, like the number of tickets left or trending events, can make planning quicker and clearer.

3. Saving Time During Booking

A one-click booking feature for registered users with saved details can speed up the process. For busy events, a queue system would keep things fair and avoid overloads. Adding a multi-booking option, where users can book tickets for several events in one go, would make things more convenient.

4. Other Improvements

The system should work well on mobile devices since many people prefer booking through their phones. A feedback option would help identify areas that need fixing or improvement. Accessibility features like text-to-speech and high-contrast modes should also be included for inclusivity. Lastly, a loyalty program for regular users would encourage them to keep using the system.

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