FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY

AACS2204 OBJECT-ORIENTED PROGRAMMING TECHNIQUES

ASSIGNMENT

SEMESTER 202501

Programme (Year & Group)	:	DCSG1 Y1S3
Tutor Name	:	Mr. Ng Kar Kai
Tutorial Group	:	G1
Date Submitted	:	2 May 2025

No	Name	Student ID	Marks			Total Marks
			Section A	Section B	Section C	
1	Law Tian Xiang	24PMD02153				
2	Tan Shu Jun	24PMD04155				
3	Ng Jie Ying	24PMD03197				
4	Goh Xue Rou	24PMD03454				
5						

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Diploma in Computer Science (DCS)

Year 1 Semester 3

Tutorial Group 1

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Read, complete, and sign this statement to be submitted with the written report.

We confirm that we have read and shall comply with all the terms and conditions of TAR University of Management and Technology's plagiarism policy.

We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is my own properly derived work.

Declaration Statement Acknowledged by

No	Name	Student ID	Signature	Date
1	Law Tian Xiang	24PMD02153		
2	Tan Shu Jun	24PMD04155		
3	Ng Jie Ying	24PMD03197		
4	Goh Xue Rou	24PMD03454		

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I **Goh Xue Rou** acknowledge the use of AI generative technology.

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Date : 11 Apr 2025

Assignment Assessment Rubrics

No	Student Name	Student ID	Final Marks
1	Law Tian Xiang	24PMD02153	
2	Tan Shu Jun	24PMD04155	
3	Ng Jie Ying	24PMD03197	
4	Goh Xue Rou	24PMD03454	

Programme of Study	D (CS)
Tutorial Group	Group (1)

CLO 2	Demonstrate an object-oriented program using appropriate programming fundamentals with regards to arrays, methods and exception handling. (P4, PLO3)

Section A: Program Output & Correctness - Individual Marks (25 Marks)

Task	Weight	Max. Marks	Excellent	Good	Average	Poor	Very Poor	Scores (Point x Weight)	Remarks
			5	4	3	2	1		
Completeness of the program	**2.0**	**10**	Completed 100% of the functional requirements. All operations are implemented correctly.	Completed all of the functional requirements but implemented with minor errors.	Completed most of the functional requirements but implemented with errors.	Completed < 50% of the functional requirement and < 50% of the operations implemented correctly.	Did not complete any of the functional requirement at all	**No** / **Marks**: 1, 2, 3, 4	
Exception Handling	**1.0**	**5**	Output is correct with comprehensive	Output is correct with appropriate exception handling.	Output is correct with little exception handling.	Output is somewhat correct with little proper	Output is totally wrong with no proper exception handling.	**No** / **Marks**	

			exception handling.			exception handling.		1 2 3 4	
Design of the Output	**1.0**	**5**	Excellent formatted output. Program displays more than expected	Good formatted output and program displays as expected.	Appropriate output design and display as expected.	Poorly designed output.	Minimum to no formatted output with messy display.	**No** / **Marks** 1 2 3 4	
Program Code Quality & Standard	**1.0**	**5**	All identifiers strictly conform to the standard Java naming convention and all are meaningful	Most of the identifiers conform to the standard Java naming convention and are meaningful	Some of the identifiers conform to the standard Java naming convention and some are meaningful	Limited numbers of the identifiers conform to the standard Java naming convention or are barely meaningful.	All of the identifiers conform to the standard Java naming convention or not meaningful	**No** / **Marks** 1 2 3 4	
Total Marks (25 marks):								**1** **2** **3**	

	4	

CLO 3	Analyse the concepts of encapsulation, inheritance and polymorphism based on programming problems. (C4, PLO2)								
Section B: Object-Oriented Concept - Group Marks (45 Marks)									
Task	**Weight**	**Max. Marks**	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**	**Scores (Point x Weight)**	**Remarks**
			5	**4**	**3**	**2**	**1**		
Class Implementation	**1.0**	**5m**	Identified the proper classes, methods and attributes to solve particular problems.	Identified appropriate classes, methods and attributes to solve particular problems with minor errors.	Able to identify only some classes, methods and attributes to solve particular problems.	Inappropriate classes, methods and attributes are used.	Unable to show understanding on the usage of classes, methods and attributes.		
Object Implementation	**1.0**	**5m**	Able to create a structure of objects collaborating among themselves to carry out tasks properly.	Able to create a structure of object collaborating among themselves to carried out task properly with little minor mistakes	Structure of collaborating object created with some mistakes	Structure of collaborating objects created is barely correct.	Wrong structure of object collaboration like one object doing everything itself.		
Abstraction	**1.0**	**5m**	Define the class at the proper level of abstraction	Define the class at the proper level of abstraction with minor mistake	Classes defined at the proper level of abstractions with some mistakes	< 50% of correct abstraction is used	Lack of abstraction (abstract classes and methods).		

			(abstract classes and methods).						
Encapsulation	**2.0**	**10m**	Completely correct implementation of encapsulation (private modifier, setter and getter methods).	Correct implementation of encapsulation with only some minor mistakes	Acceptable amount of correct implementation of encapsulation is applied in program	< 50% of correct implementation for encapsulation applied in program	Completely incorrect implementation of encapsulation (private modifier, setter and getter methods)		
Inheritance	**2.0**	**10m**	Completely correct use of inheritance (correct use of extends keyword, super & sub class)	Correct implementation of inheritance with only some minor mistakes	Acceptable amount of correct implementation of inheritance is applied in program	< 50% of correct implementation for inheritance applied in program	Completely incorrect use and implementation of inheritance		
Polymorphism	**2.0**	**10m**	Completely correct use and implementation of polymorphism. Methods toString() & equals() correctly overridden.	Correct implementation of polymorphism with only some minor mistakes	Acceptable amount of correct implementation of polymorphism is applied in program	< 50% of correct implementation for polymorphism applied in program	Completely incorrect use and implementation of polymorphism.		
							Total Marks (45 marks):		

CLO 3	Analyse the concepts of encapsulation, inheritance and polymorphism based on programming problems. (C4, PLO2)								
Section C: Object-Oriented Concept - Group Marks (30 Marks)									
Task	**Weight**	**Max. Marks**	**Excellent**	**Good**	**Average**	**Poor**	**Very Poor**	**Scores (Point x Weight)**	**Remarks**
			5	**4**	**3**	**2**	**1**		
Cohesion	**1.0**	**5m**	The code demonstrates exceptional cohesion with all modules, classes, or functions having a clear and single responsibility.	The code demonstrates good cohesion overall where most modules, classes, or functions have a clear and single responsibility	Some modules, classes, or functions have a clear and single responsibility, but others may be slightly ambiguous	Few modules, classes, or functions have a clear and single responsibility.	Modules, classes represent more than one entity and lack of clear responsibility. Poor class cohesion.		
Coupling	**1.0**	**5m**	Minimal or no direct dependency between modules, classes, or functions. Coupling is effectively managed, resulting in highly maintainable and modular code	Most modules, classes, or functions have minimal direct dependencies.	Some modules, classes, or functions have moderate direct dependencies.	Many modules, classes, or functions have significant direct dependencies.	Modules, classes, or functions have excessive and tightly coupled dependencies which make module be harder to reuse or test.		
Association, Aggregation	**2.0**	**10m**	Associations between classes	Associations between classes	Some associations	Several associations	Completely incorrect use and		

and Composition			are accurately identified and properly established.	are generally identified and properly established.	between classes may be missing or improperly established.	between classes are missing or improperly established.	implementation of association, aggregation and composition relationship.		
UML Class Diagram	**2.0**	**10m**	The UML class diagram demonstrates excellent understanding and implementation. All classes, attributes, and methods are accurately represented with appropriate visibility, data types, and associations.	Most classes, attributes, and methods are accurately represented with appropriate visibility, data types, and associations.	Some classes, attributes, and methods may be missing or inaccurately represented, with visibility, data types, or associations not fully defined.	Many classes, attributes, and methods are missing or inaccurately represented, with visibility, data types, or associations not adequately defined.	Classes, attributes, and methods are missing or inaccurately represented, with visibility, data types, or associations lacking clarity or definition.		
							Total Marks (30 marks):		

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1.1 Introduction

The Siok Cinema Ticketing System is a software application designed to **manage and streamline the process of booking, purchasing and managing movie tickets** for our cinema. It serves as an interface between the cinema management and the customers, offering an **efficient, organised and user-friendly experience for both**. The core functionalities of the system are:

1. **Movie Listing and Schedule Display** which shows the currently available movies along with their showtimes, duration and ratings.
2. **Seat Selection and Booking** which allows the user to select their preferred seat.
3. **Ticket Purchase and Payment Processing** which enables the user to purchase tickets using various payment methods such as credit/debit card, e-wallet and online banking.
4. **Cinema Staff Interface** which allows staff to manage movie's schedule, bookings cancellation and reports.
5. **Cancellation and Refund** which supports ticket cancellation and refund processing based on cinema policies.
6. **Promotions and Discounts** that apply promotional codes or discounts.
7. A **Reporting System** that will generate sales reports for management.

The system's primary purpose is to **automate and digitise ticketing operations** to **reduce manual work, eliminating errors and enhancing the overall user experience**. This system will benefit users through:

1. **Convenience** where users can view showtimes, select seats and pay for their movie ticket online without standing in queues.
2. **Efficient for staff** as the cinema employees can manage operations more easily through the backend system.

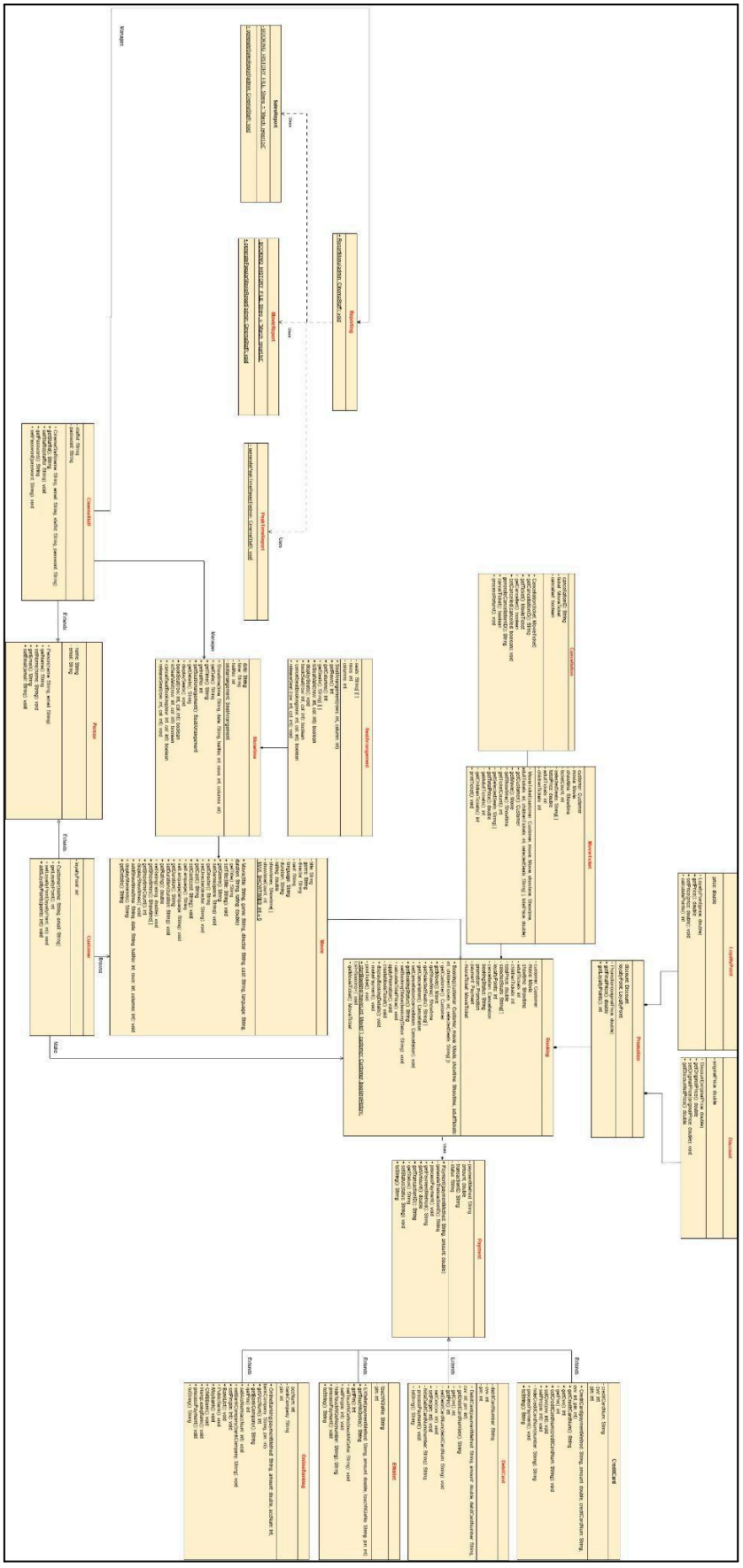
Key operations supported:

- Browsing movies and showtimes
- Booking and reserving seats
- Processing payments and issuing tickets
- Handling cancellations and refunds
- Generating reports

1.2 Task Allocation

Student Name	Modules Handled	Description
Law Tian Xiang	Reporting Sales Report Movie Report Peak Time Report Loyalty Point Discount	Create a Reporting class to show the report menu and let staff choose which is the sales report, popular movie report and peak time report. Firstly, in the sales report, it sums and shows last month total profit for the cinema. Secondly, in the movie report, it shows every movie profit earned. Thirdly, in the peak time report, it will show the everyday peak hour range. For the Discount class, if the price is RM60 and above the discount will only apply. The loyalty point class calculates the point earned based on the price converted to 1 point with every RM5 spend.
Tan Shu Jun	Person Customer Cinema Staff Movie Showtime	Create a person class as a parent class to let the customer class and cinema staff class to inherit; Create Customer class declare all the needed data members and methods; Create Cinema Staff Class and declare all the needed data members and methods;Create Showtime Class so that can use to create Showtime for each specific movie; Create Movie Class to create new movies object.
Ng Jie Ying	Booking Movie Ticket Cancellation Seat Arrangement Promotion	Create a booking class to store attributes of booking, calculate total price of tickets, apply promotion to the ticket, display the booking details, handle payment process after booking is done, handle booking process, display seat arrangement, handle seat booking process and release seat after cancellation, handle cancellation process and make a refund to the customer.
Goh Xue Rou	Payment Credit Card Debit Card EWallet Online Banking	Create a payment class that is used to store attributes about a payment. It keeps track of the payment method, the total amount to be paid, the transaction ID, and the current payment status. This class supports different types of payment methods. For credit or debit card payments, it will ask for the card number, CVV, and PIN. For e-wallet payments, it will ask for the wallet ID and PIN. If the user chooses online banking, they must select their preferred bank to complete the payment process.

1.3 UML Diagram



1.4 System Workflows

1.4.1 Siok Cinema System Menu

First, the user must choose either "customer", "cinema staff" or “exit” to continue, as shown in *Figure 1.4.1.1*.

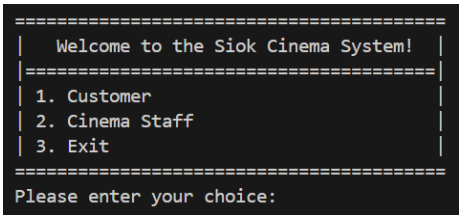


Figure 1.4.1.1 shows the Siok Cinema System Menu for users to select

If the user enters 1 as their choice, the system will go to the customer page as shown in *Figure 1.4.1.2* and *Figure 1.4.2.1*.

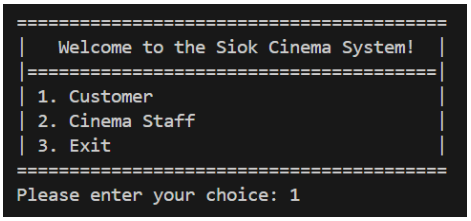


Figure 1.4.1.2 shows the User’s Choice of 1 to enter the Customer Login Page

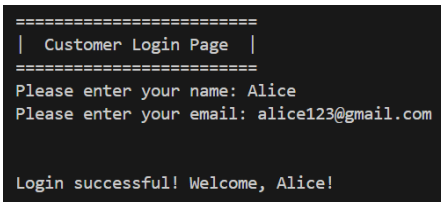


Figure 1.4.2.1 shows the Customer Login Page

If the user enters 2 as their choice, the system will go to the cinema staff login page as shown in *Figure 1.4.1.3* and *Figure 1.4.3.1*.

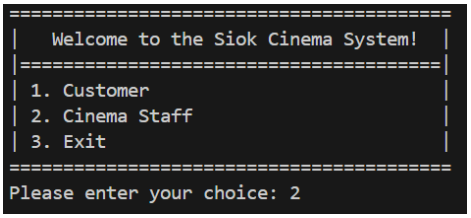


Figure 1.4.1.3 shows the User’s Choice of 2 to enter the Cinema Staff Login Page

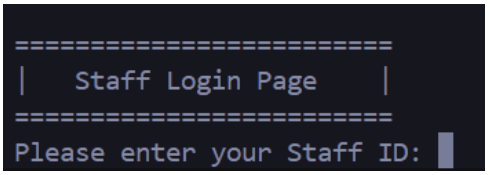


Figure 1.4.3.1 Shows the Staff Login Page

If the user enters 3 as their choice, the system will prompt the message “Exiting the system. Goodbye!” and then close the system as shown in *Figure 1.4.1.4*.

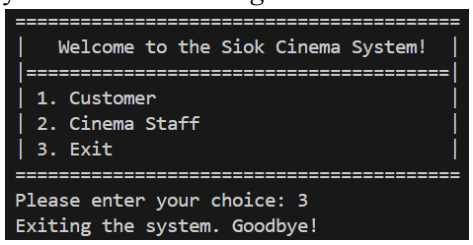


Figure 1.4.1.4 shows the User’s Choice of 3 to Exit the System

However, if the user entered an invalid input such as non-numeric or out of range, the system will prompt an error message to the user as shown in *Figure 1.4.1.5*.

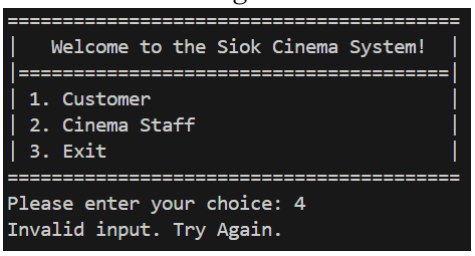


Figure 1.4.1.5 shows the Invalid Input entered by the users

1.4.2 Customer Page

1.4.2.1 Customer Login Page

The system will ask the user to enter their name and email address once they have accessed the customer login page by choosing the first option from the main menu page which is customer. Then, the system will display their name and a message stating that their login was successful after they have entered their information as shown in *Figure 1.4.2.1*.

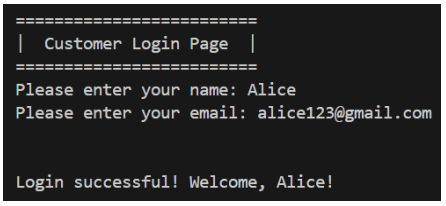


Figure 1.4.2.1 shows the Customer Login Page

However, if the user entered an invalid name or email address such as containing invalid characters or missing the '@' symbol, the system will prompt an error message to the user as shown in *Figure 1.4.2.2* and *Figure 1.4.2.3*.

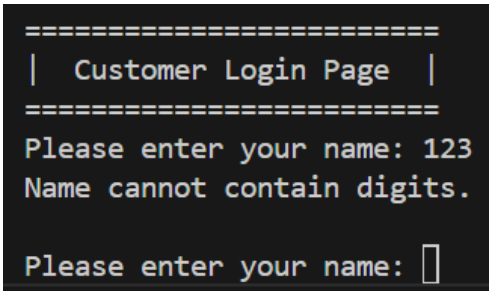


Figure 1.4.2.2 shows the Invalid Name Entered by the Customer

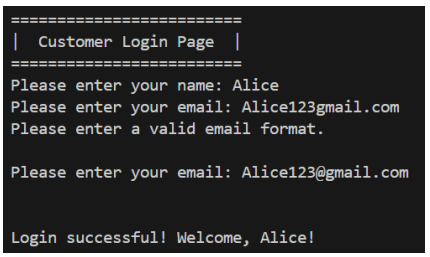


Figure 1.4.2.3 shows the Invalid Email Address Entered by the Customer

1.4.2.2 View Movie List

After that, the system will prompt a menu that requires the user to select their preferred functionalities to proceed with the process as shown in *Figure 1.4.2.2.1*.

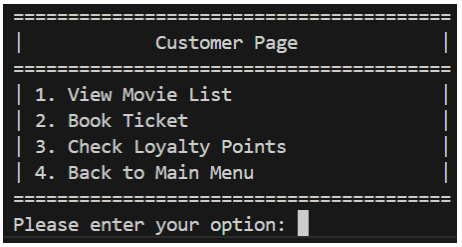


Figure 1.4.2.2.1 shows the Customer Page

If the user enters 1, the system will prompt the available movie list as shown in *Figure 1.4.2.2.2*. After viewing the available movie list, the system will redirect them to the menu page as shown in *Figure 1.4.2.2.1*.

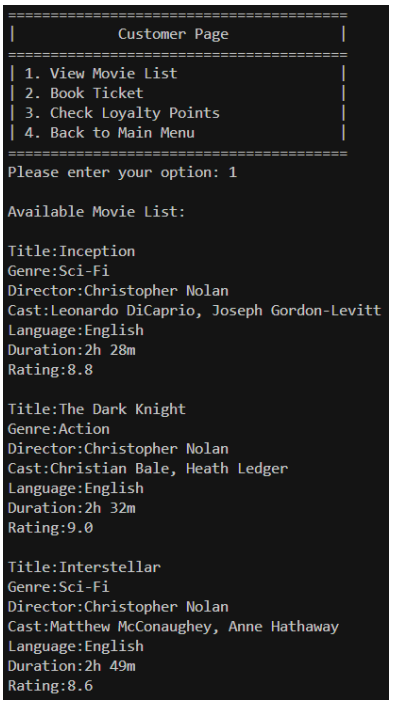


Figure 1.4.2.2.2 shows the Available Movie List

However, if the user entered an invalid input such as non-numeric or out of range, the system will prompt an error message to the user as shown in *Figure 1.4.2.2.3*.

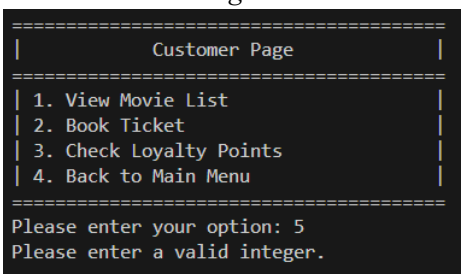


Figure 1.4.2.2.3 shows the Invalid Input Entered by the Customer

1.4.2.3 Book Ticket

If the user enters 2 from *Figure 1.4.2.2.1*, the system will prompt the message as shown in *Figure 1.4.2.3.1*.

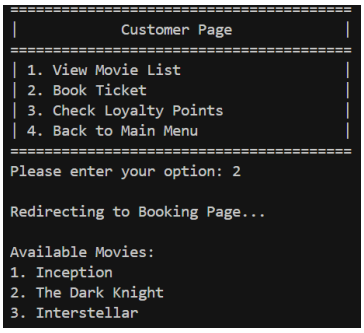


Figure 1.4.2.3.1 shows the Message to Update the User

Then, user are required to enter their preferred movie, showtime, seats and their number of tickets as shown in *Figure 1.4.2.3.2*.

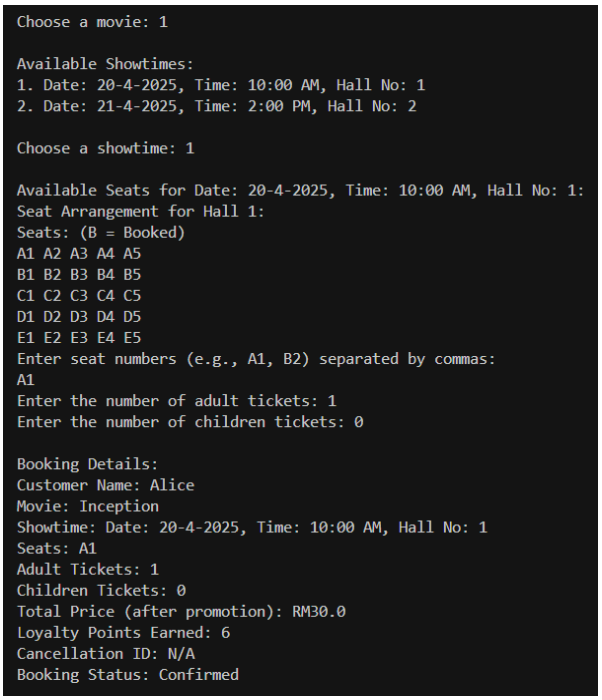


Figure 1.4.2.3.2 shows the User's Preferred Booking

However, the error messages will be prompted to the user if they have entered an invalid input or the seat is not available as shown in *Figure 1.4.2.3.3, Figure 1.4.2.3.4* and *Figure 1.4.2.3.5*.

```
Redirecting to Booking Page...

Available Movies:
1. Inception
2. The Dark Knight
3. Interstellar

Choose a movie: 4
Invalid choice. Returning to main menu...
```

Figure 1.4.2.3.3 shows the Message that indicates the Input Entered by the Customer is Invalid

```
Choose a movie: 1

Available Showtimes:
1. Date: 20-4-2025, Time: 10:00 AM, Hall No: 1
2. Date: 21-4-2025, Time: 2:00 PM, Hall No: 2

Choose a showtime: 3
Invalid choice. Returning to main menu...
```

Figure 1.4.2.3.4 shows the Message that indicates the Input Entered by the Customer is Invalid

```
Available Seats for Date: 20-4-2025, Time: 10:00 AM, Hall No: 1:
Seat Arrangement for Hall 1:
Seats: (B = Booked)
B A2 A3 A4 A5
B1 B2 B3 B4 B5
C1 C2 C3 C4 C5
D1 D2 D3 D4 D5
E1 E2 E3 E4 E5
Enter seat numbers (e.g., A1, B2) separated by commas:
A1
Seat A1 is unavailable.
Failed to book all seats. Please try again.
```

Figure 1.4.2.3.5 shows the Message that indicates the Seat is not Available

After making their booking, users must choose either “credit card”, “debit card”, “e-wallet” or “online banking” as their payment method to pay for the reservation as shown in *Figure 1.4.2.3.7*.

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice:
```

Figure 1.4.2.3.8 shows the Various Choices of Payment Methods

If the user enters 1 or 2, the system will require the user to enter their credit or debit card number, CVV and also the PIN to complete the payment process as shown in *Figure 1.4.2.3.9* and *Figure 1.4.2.3.10*.

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice: 1
Enter Credit Card Number: 1234567890987654
Enter CVV: 123
Enter PIN: 123456
```

Figure 1.4.2.3.9 shows the Details of the Credit Card entered by the customer

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice: 2
Enter Debit Card Number: 1234567890987654
Enter CVV: 123
Enter PIN: 123456
```

Figure 1.4.2.3.10 shows the Details of the Debit Card entered by the customer

Once the payment is successful, the system will show the user's payment details along with the movie ticket information as shown in *Figure 1.4.2.3.11* and *Figure 1.4.2.3.12*.

```
Processing credit card payment...
Credit Card Number: ************7654
Verifying CVV: 123
Verifying PIN: 123456
Payment Successful. Transaction ID: T204

Movie Ticket:
Movie: Inception
Showtime: Date: 20-4-2025, Time: 10:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price: RM30.0
Thank you for your purchase!
```

Figure 1.4.2.3.11 shows the Details of the Payment Method and the Movie Ticket through Credit Card

```
Processing debit card payment...
Debit Card Number: ************7654
Verifying CVV: 123
Verifying PIN: 123456
Payment Successful. Transaction ID: T332

Movie Ticket:
Movie: Inception
Showtime: Date: 20-4-2025, Time: 10:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price: RM30.0
Thank you for your purchase!
```

Figure 1.4.2.3.12 shows the Details of the Payment Method and the Movie Ticket through Debit Card

If the user enters 3, the system will require the user to enter their Wallet ID and PIN to complete the payment process as shown in *Figure 1.4.2.3.13*. Once the payment is successful, the system will show the user's payment details along with the movie ticket information as shown in *Figure 1.4.2.3.14*.

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice: 3
Enter Wallet ID: 1234
Enter PIN: 1234
```

Figure 1.4.2.3.13 shows the Details of E-Wallet entered by the customer

```
Processing e-wallet payment...
Touch 'n Go Number: 1234
Verifying PIN: 123
Payment Successful. Transaction ID: T951

Movie Ticket:
Movie: Inception
Showtime: Date: 20-4-2025, Time: 10:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price: RM30.0
Thank you for your purchase!
```

Figure 1.4.2.3.14 shows the Details of the Payment Method and the Movie Ticket through E-Wallet

If the user enters 4, the system will require the user to enter their bank account number, bank name and PIN to complete the payment process as shown in *Figure 1.4.2.3.15*. Once the payment is successful, the system will show the user's payment details along with the movie ticket information as shown in *Figure 1.4.2.3.16*.

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice: 4
Enter Account Number: 12345678
Enter Bank Name: Publicbank
Enter PIN: 123456
```

Figure 1.4.2.3.15 shows the Details of Online Banking entered by the customer

```
Processing online banking payment...
Bank Company: PublicBank
Account Number: 12345678
Verifying PIN: 123456
Payment Successful. Transaction ID: T085

Movie Ticket:
Movie: Inception
Showtime: Date: 20-4-2025, Time: 10:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price: RM30.0
Thank you for your purchase!
```

Figure 1.4.2.3.16 shows the Details of the Payment Method and the Movie Ticket through Online Banking

However, if the user has chosen for invalid payment method, the system will prompt the error message as shown in *Figure 1.4.2.3.17*.

```
Choose Payment Method:
1. Credit Card
2. Debit Card
3. E-Wallet
4. Online Banking
Enter your choice: 5
Invalid choice. Payment aborted.
```

Figure 1.4.2.3.17 shows the Invalid Choice of Payment Method along with the Error Message

1.4.2.4 Check Loyalty Points

Furthermore, customers can view their loyalty points by selecting the third option in the menu as shown in *Figure 1.4.2.2.1*. *Figure 1.4.2.4* shows an example of loyalty points of a Customer.

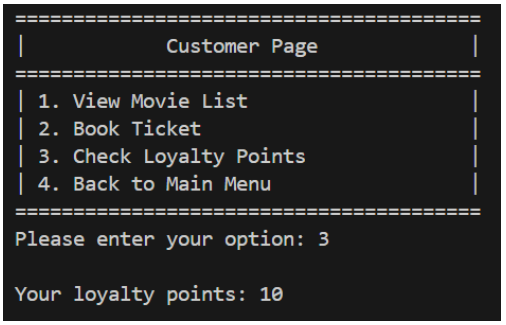


Figure 1.4.2.4 shows an example of Loyalty Points of a Customer

1.4.2.5 Back to Main Menu

If a customer enters 4 as the input as shown in *Figure 1.4.2.5*, the system will automatically direct them to the main menu as shown in *Figure 1.4.1.1*.

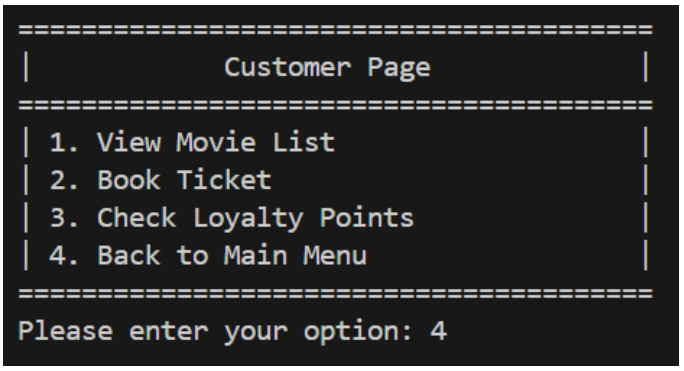


Figure 1.4.2.5 shows the Option as 4

1.4.3 Staff Page

If the user chooses to login as a cinema staff by inputting number 2, the system will bring the user to the cinema staff page as shown in *Figure 1.4.3.1*.

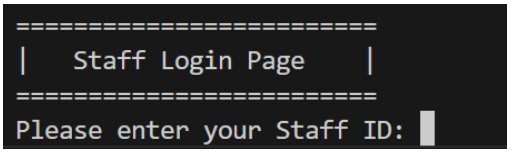


Figure 1.4.3.1 Shows the Staff Login Page

Then, the user will need to enter their staff ID. If the user enters the wrong ID, the system will print out an error message and the user will be required to reenter their staff ID again. (Refer to *Figure 1.4.3.2*)

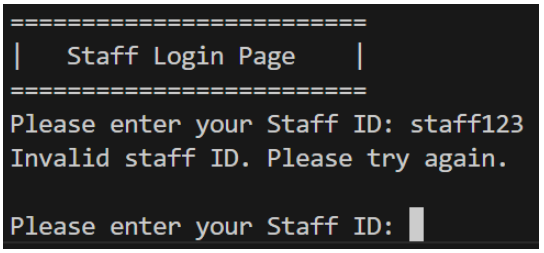


Figure 1.4.3.2 Shows Entering Wrong Staff ID

If the staff ID is correct, the system will then ask the user to enter their password. If the user enters the wrong password, the system will also print out an error message and let the user re-enter their password again.

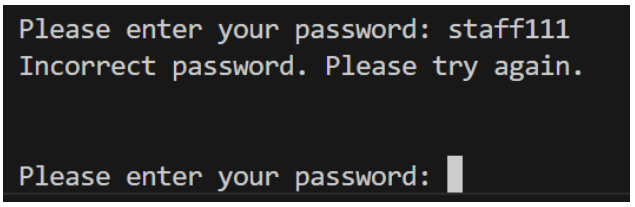


Figure 1.4.3.3 Shows Incorrect Password

If the password is correct, the system will then show the staff page as shown in *Figure 1.4.3.4* After that, users will be able to choose what process they want to proceed.

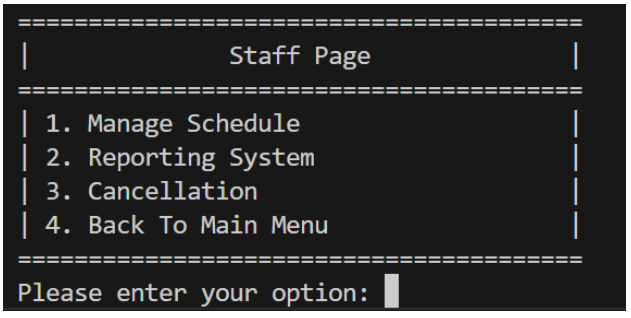


Figure 1.4.3.4 Shows Staff Page

1.4.3.1 Manage Schedule Page

When the user enters number 1 in the staff page, the system will show out the managed schedule page as shown in figure 1.4.3.1.1.

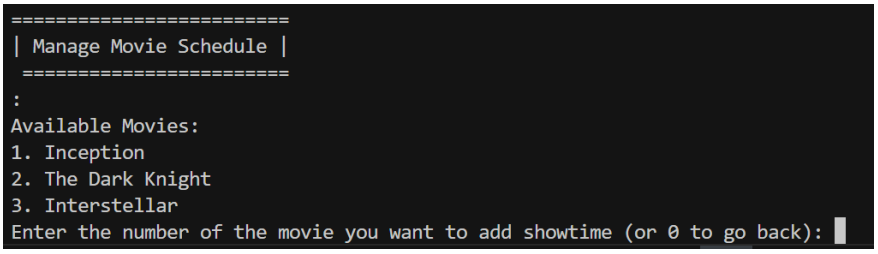


Figure 1.4.3.1.1.1 Shows Manage Movie Schedule Page

The Manage Movie Schedule page will show out the available movies. Users can choose the movie they want to manage by entering the number of movies or entering 0 to go back to the staff main page. For example, users choose to manage showtime of Inception. After entering number 1, the system will require users to enter the showtime in the format of **hh:mm period**. Then, users will need to enter the date of the showtime in the format of **dd-mm-yyyy**.

After entering the date and time, the user will need to enter the hall number of the showtime. The detailed information of the hall such as the number of rows and columns in the hall are also needed. When all of the information is entered completely, the system will then print a success message to the user. Lastly, the user will be sent to the Staff Page.

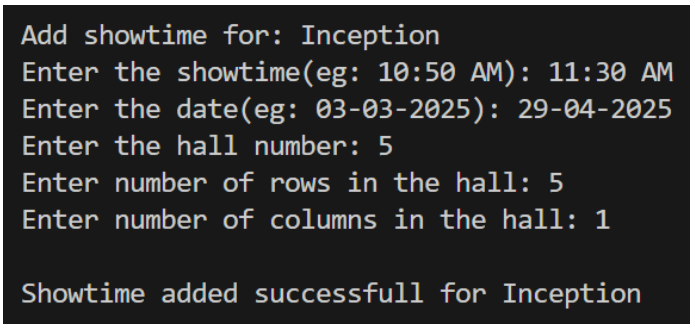


Figure 1.4.3.1.1.2 Shows Add Showtime Page

1.4.3.2 Reporting System

When the user chooses to navigate to the reporting system by entering number 2, the system will bring the user to the Reporting Menu Page as shown in figure 1.4.3.2.1.

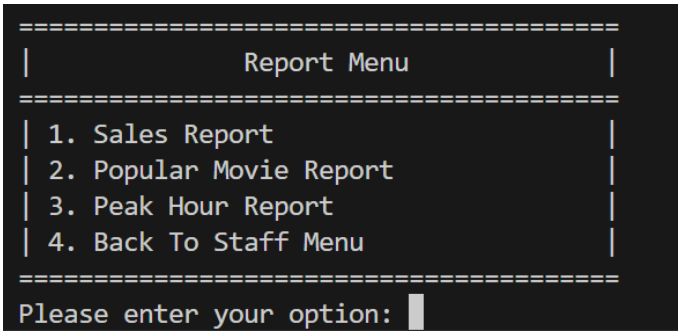


Figure 1.4.3.2.1 Shows Report Menu Page

Then, users will be able to choose which function they want to proceed with. If a user enters number 1, the system will show the Sales Report as shown in figure 1.4.3.2.2. If the user chooses to enter number 2, the system will show out the Popular Movie Report as shown in figure 1.4.3.2.3. If the user enters number 3, the system will display the Peak Hour Report as shown in figure 1.4.3.2.4. After viewing the reports, the user can go back to the main menu by entering any number. If a user wishes to go back to the main menu immediately after coming to the report menu page, they can enter number 4 to go back to the Staff Menu.

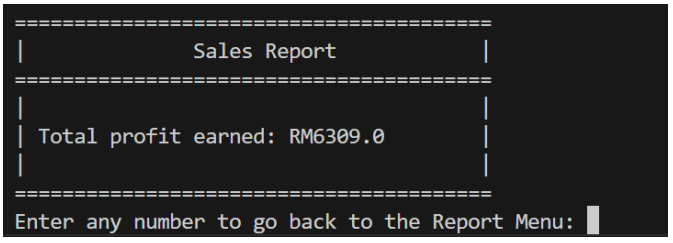


Figure 1.4.3.2.2 Shows Sales Report Page

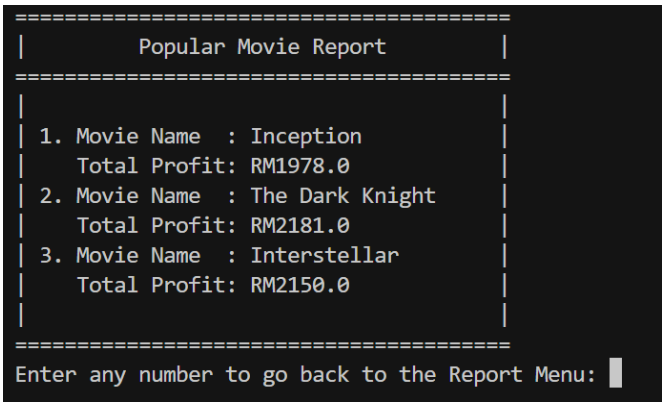


Figure 1.4.3.2.3 Shows Popular Movie Report Page

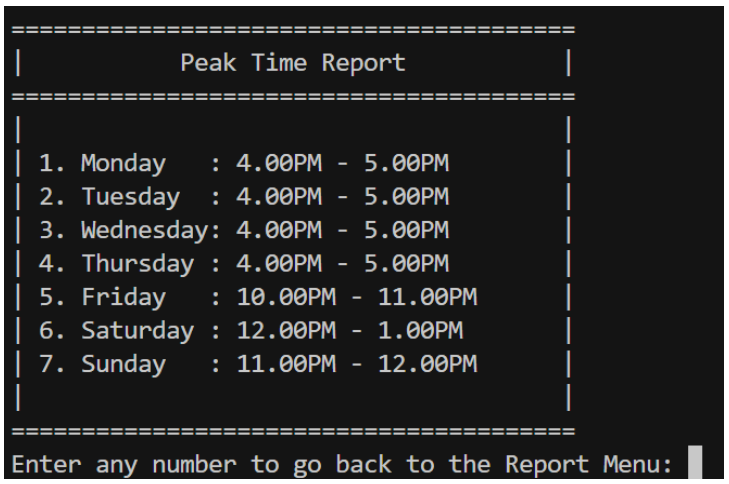


Figure 1.4.3.2.4 Shows Peak Time Report Page

1.4.3.3 Cancellation Page

If the user chooses to enter number 3, the system will display the cancellation page to the user as shown in figure 1.4.3.3.1. The cancellation page will show out the booking and its information that is available to be canceled. So, users will need to enter the number of booking to cancel the booking required by the customer. The user can also enter 0 to go back to the main menu if there is no cancellation needed.

```
============================
|      Cancellation Page     |
============================

Current Bookings:
1. Booking for ying - The Dark Knight - Date: 22-4-2025, Time: 11:00 AM, Hall No: 1 (Cancellation ID: N/A)
2. Booking for Minnie - Interstellar - Date: 25-4-2025, Time: 4:00 PM, Hall No: 2 (Cancellation ID: N/A)
Enter the number of the booking you want to cancel (or 0 to go back):
```

Figure 1.4.3.3.1 Shows Cancellation Page

For example, the user will enter number 1 to cancel the booking of customer name ying. Then, the system will show the detailed information of the booking to the user for double confirmation. After checking for the information, the user will need to enter **yes** to proceed the confirmation process. If the user realizes that the selected booking is wrong, the user can stop the cancellation process by entering **no**.

```
Confirm cancellation for:

Booking Details:
Customer Name: ying
Movie: The Dark Knight
Showtime: Date: 22-4-2025, Time: 11:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price (after promotion): RM30.0
Loyalty Points Earned: 6
Cancellation ID: N/A
Booking Status: Confirmed
Do you sure u want to cancel this booking? (yes/no):
```

Figure 1.4.3.3.2 Shows Example of Cancellation Process

After entering **yes** for double confirmation, the system will print a cancellation successful message to the user followed by the cancellation id and information of the cancelled booking. After that, the system will make a refund to the customer and print out a refund successful message and seat released successful message to the staff.

```
Do you sure u want to cancel this booking? (yes/no): yes
Ticket has been cancelled successfully!
Cancellation ID: C16133

Movie Ticket:
Movie: The Dark Knight
Showtime: Date: 22-4-2025, Time: 11:00 AM, Hall No: 1
Seats: A1
Adult Tickets: 1
Children Tickets: 0
Total Price: RM30.0
Thank you for your purchase!
Processing refund...
Refund amount: RM30.00
Refund successfully send to the customer.
Seat released successfully.
```

Figure 1.4.3.3.3 Shows Example of Double Confirmation in Cancellation Process

If there isn't any booking yet, the system will show out "No Booking available for cancellation: message to the users.

```
==============================
|      Cancellation Page     |
==============================
No Bookings available for cancellation.
```

Figure 1.4.3.3.4 Shows Cancellation Page

1.4.4 Exit Siok Cinema System

The user has entered the input 3, which corresponds to the "Exit" option. As a result, the system responds by displaying the message **"Exiting the system. Goodbye!"** and then immediately terminates the program. This allows the user to exit the system safely and intentionally.

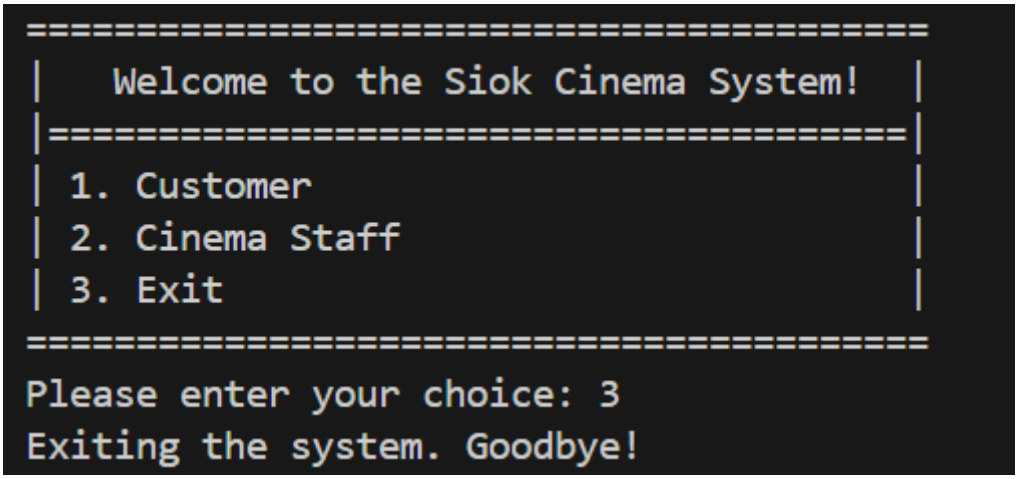


Figure 1.4.4.1 Shows Exit Siok Cinema System