



AACS1084

Programming Concepts & Design II

Assignment

2024

Programme	:	Diploma in Information Technology
Tutorial Group	:	Group 4
Date Submitted to Tutor	:	

Team Members:

No	Student Name	Student ID
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3.	Goh Chun Wen	2302211
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No.	Team Member	Task(s) Allocated	Overall Contribution (%)
1.	Chaw Chun Jia	Train Scheduling Module	25%
2.	Ooi Jun Kang	Member Module	25%
3.	Goh Chun Wen	Ticket Booking Module	25%
4.	Wong Shun Bin	Staff Module	25%

Coursework Declaration

We confirm that we have read and shall comply with all the terms and conditions of TAR University College's plagiarism policy. We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is our own properly derived work.

Signature :	<i>Chaw</i>	<i>Jkang</i>	<i>Chun</i>	<i>Wong</i>
Name :	Chaw Chun Jia	Ooi Jun Kang	Goh Chun Wen	Wong Shun Bin
Photo :				
Date :	2/5/2024	2/5/2024	2/5/2024	2/5/2024

Assignment Evaluation Form

Student Name	Chaw Chun Jia	Ooi Jun Kang	Goh Chun Wen	Wong Shun Bin	
Module handled	Train Scheduling	Member	Ticket Booking	Staff	
Assessment Criteria	Marks Awarded				
Application of Programming Knowledge					
<u>Structures</u> <ul style="list-style-type: none"> • Basic + extra fields, • Use of nesting & arrays • Appropriate usage 	12				
<u>File Processing</u> <ul style="list-style-type: none"> • successful processing • Validation of data • Appropriate usage 	12				
<u>Functions</u> <ul style="list-style-type: none"> • 4 Basic file fns, • Extra file fns, useful/correct • Approp. menu design & process 	12				
<u>Others</u> <ul style="list-style-type: none"> • Use of parameters; correct usage • Subsidiary working functions • Minimized global variables 	12				
<u>Teamwork</u> <ul style="list-style-type: none"> • Main menu, logo etc • System/module integration • Report integration/content • Sharing of files, functions • Communication, cooperation 	12				
<u>Program originality, efficiency and readability</u> <ul style="list-style-type: none"> • Innovation, uniqueness • Approp. logic structures • Code Readability 	10				
<u>Report (indiv. section)</u> <ul style="list-style-type: none"> • Clarity of description • Narrated Screens for all processes (basic + extra) 	20				
<u>Penalty - Late Submission</u> <ul style="list-style-type: none"> • 1-3 days late □ -10 • 4-7 days late □ -20 >7 days late => Total mark = 0					
Subtotal (i)					
<u>Presentation</u> <ul style="list-style-type: none"> • Organization, explanation • Enthusiasm, preparedness, attitude, understanding • Q&A handling 	10				
TOTAL MARK					

Note: In addition to the late penalty, marks will also be deducted under the different categories for other reasons, eg. bad programming practices, uncooperativeness, etc.

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1.0 Introduction

The Train Booking Schedule System, meticulously crafted in C programming language, stands as a comprehensive solution tailored to efficiently manage key aspects of train booking operations. With a core focus on staff management, member registration, ticket booking, and train scheduling, this system aims to streamline processes, enhance user experiences, and optimize resource utilization.

Staff Management Module:

At the heart of the system lies the Staff Management Module, where administrators wield the tools to orchestrate the roles, accounts, and permissions of personnel. Through this module, the allocation of responsibilities is finely tuned, ensuring smooth collaboration among team members while maintaining robust security measures to safeguard sensitive information and system integrity.

Member Registration Module:

The Member Registration Module serves as the gateway for passengers to establish their presence within the system. Offering a seamless registration process, passengers can create and manage their accounts with ease, providing necessary personal details and preferences. Beyond mere registration, this module fosters a personalized experience, allowing users to track their booking history, set preferences, and participate in loyalty programs, thereby enhancing customer engagement and retention.

Ticket Booking Module:

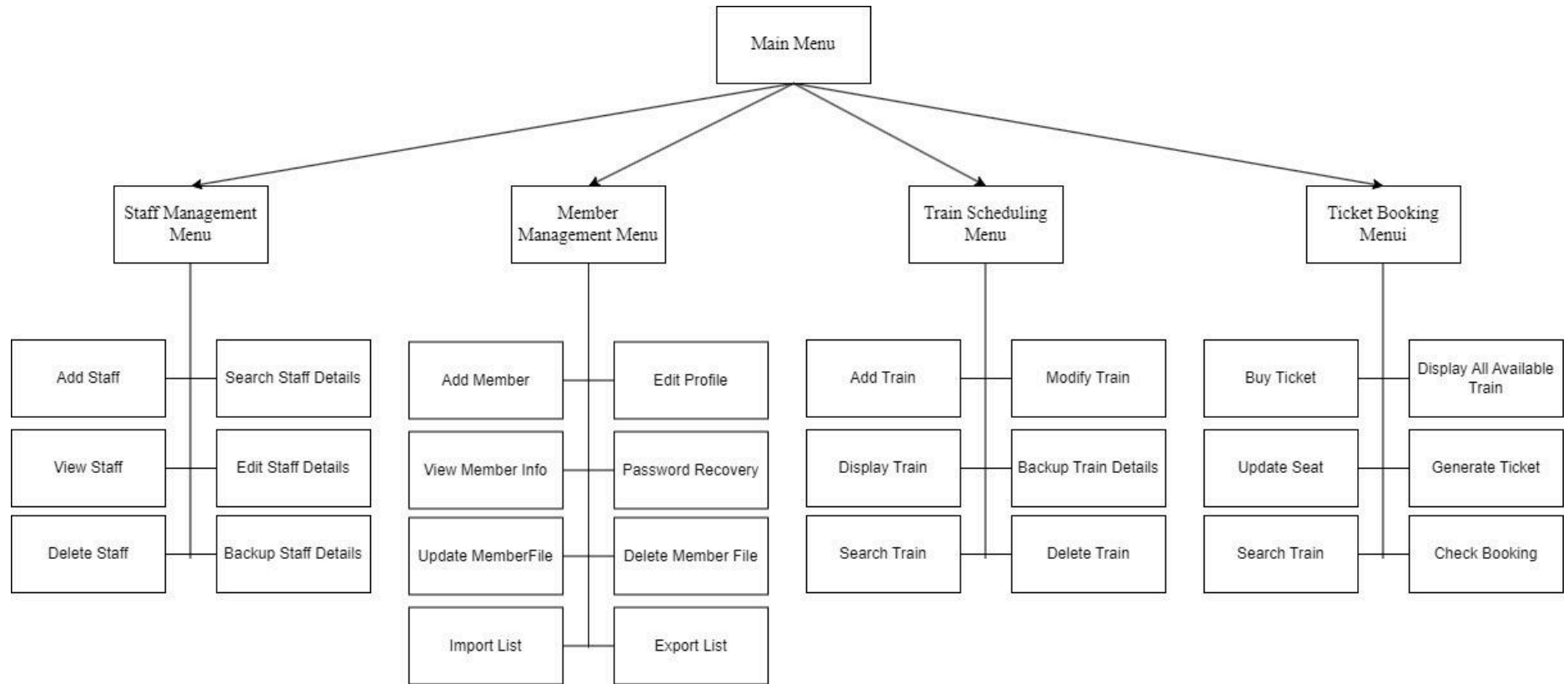
Central to the passenger experience is the Ticket Booking Module, where the journey from inquiry to confirmation is seamlessly navigated. Passengers are empowered to explore available train options, select preferred routes, and secure their bookings with confidence. Through secure payment gateways and robust validation mechanisms, the module ensures the integrity and confidentiality of transactions, culminating in the issuance of electronic tickets that encapsulate vital itinerary information.

Train Scheduling Module:

The Train Scheduling Module serves as the backbone of operational efficiency, meticulously orchestrating the intricate dance of train routes, schedules, and capacities. Administrators wield a suite of tools to optimize resource allocation, fine-tune routes based on demand patterns, and adapt schedules to evolving operational needs. By harnessing the power of data-driven insights, this module empowers railway companies to maximize revenue, minimize resource wastage, and deliver superior service to passengers.

In essence, the Train Booking Schedule System represents a culmination of innovation, efficiency, and user-centric design, poised to redefine the landscape of train booking management. Through its unwavering commitment to excellence, the system streamlines operations and elevates the overall passenger experience, ushering in a new era of efficiency and convenience in railway travel

2.0 Overall System – Module Structure Chart



3.0 Home Screen / Splash Screen

The figure consists of eight sub-diagrams, labeled 1 through 8, each showing a graph with nodes and edges. The nodes are arranged in a grid-like pattern. The edges are represented by lines connecting the nodes. In each diagram, some edges are highlighted in red, indicating the current state of the algorithm. The sequence of diagrams shows the step-by-step construction of the minimum cut, with edges being added or removed as the algorithm progresses.

```
[ 1 ] Login As Member
[ 2 ] Login As Staff
[ 3 ] Exit program
```

 $\gg |$

4.0 System Modules

4.1 Staff Management by Wong Shun Bin

4.1.1 Description

The Staff Information Module serves as the backbone for managing all staff-related activities within the train ticketing system. It allows the system administrator or authorized personnel to add, view, modify, and search staff information, search for specific staff and backup staff details. This module ensures the security and integrity of staff data by providing functionalities to create and maintain staff login accounts and their associated details.

4.1.2 Outputs & File Contents

1. Module's Main Page:

```
Login successful!
=====
Staff Module
=====

[ 1 ] Staff Control Panel
[ 2 ] Member Control Panel
[ 3 ] Train Scheduling Control Panel
[ 4 ] Logout

>> |

=====
Staff Control Panel
=====

[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu

Enter your choice: |
```


2. **File's Existing Data:** The user selects "Display Staff" to view existing staff records.

```
=====
Staff Control Panel
=====

[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu
```

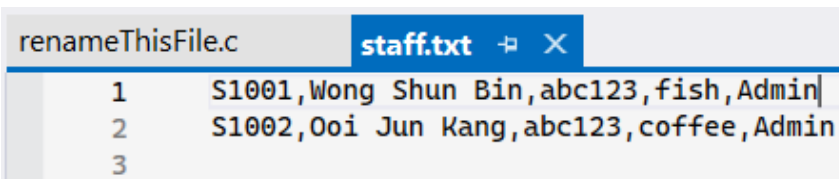
Enter your choice: 3|

```
=====
View Staff Information
=====
```

ID	Name	Password	Password Recov	Position
S1001	Wong Shun Bin	abc123	fish	Admin
S1002	Ooi Jun Kang	abc123	coffee	Admin

```
[ 1 ] Return to main menu
[ 2 ] Delete a staff
[ 3 ] Add new staff
```

Enter your choice: |



```
1 S1001,Wong Shun Bin,abc123,fish,Admin|
2 S1002,Ooi Jun Kang,abc123,coffee,Admin
3
```

3. **Adding a Record:** The user selects "Add Staff" and enters the details of the new staff member.

```
=====
Staff Control Panel
=====
```

```
[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu
```

Enter your choice: 1|

```
=====
Enter New Staff
=====
```

```
Enter ID: S1003
Enter name: Chaw Chun Jia
Enter password: chunjia1234
Enter password recovery: chunjia1111
Enter Position: Staff
Confirm the information (Y/N): Y
Data has been stored in staff.txt.
Enter another staff? (Y/N): N|
```

4. **Modify a Record:** The user selects “Modify Staff” and edit the field they wanted to edit.

```
=====
Staff Control Panel
=====

[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu

Enter your choice: 4|
```

```
=====
Edit Profile
=====

Name       : Wong Shun Bin
Password   : abc123
Position   : Admin

Edit:
[ 1 ] Name
[ 2 ] Password
[ 3 ] Position
[ 0 ] Exit
>> 3
Enter new Position: Boss|
```

```
=====
Edit Profile
=====

Name       : Wong Shun Bin
Password   : abc123
Position   : Boss

Edit:
[ 1 ] Name
[ 2 ] Password
[ 3 ] Position
[ 0 ] Exit
>> |
```

5. Deleting a Record: The user selects “Delete Staff” to remove a staff from the system.

```
=====
Staff Control Panel
=====
```

```
[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu
```

Enter your choice: 5

```
=====
Delete Staff Information
=====
```

```
Enter Staff Id that you want to delete:S1002
Staff details found:
Name: Ooi Jun Kang
Position: Admin
Are you sure you want to delete this staff? (Y/N): Y
Staff deleted successfully.
Staff information updated.
Press any key to continue . . .
```

```
=====
View Staff Information
=====
```

ID	Name	Password	Password Recov	Position
S1001	Wong Shun Bin	abc123	fish	Boss
S1003	Chaw Chun Jia	chunjia1234	chunjia1111	Staff

```
[ 1 ] Return to main menu
[ 2 ] Delete a staff
[ 3 ] Add new staff
```

Enter your choice:

```
renameThisFile.c  staff.txt  + X
1  S1001,Wong Shun Bin,abc123,fish,Boss
2  S1003,Chaw Chun Jia,chunjia1234,chunjia1111,Staff
3
```

6. **Search Staff:** Allows the staff to search staff.

```
=====
Staff Control Panel
=====
```

```
[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu
```

Enter your choice: 2

```
=====
Search Staff Information
=====
```

Enter Staff Id that you want to search:S1001

```
=====
Staff ID: S1001
Staff Name: Wong Shun Bin
Staff Position: Boss
=====
```

Press any key to continue . . .

7. **Backup Staff Details:** Backup the file of staff to another file.

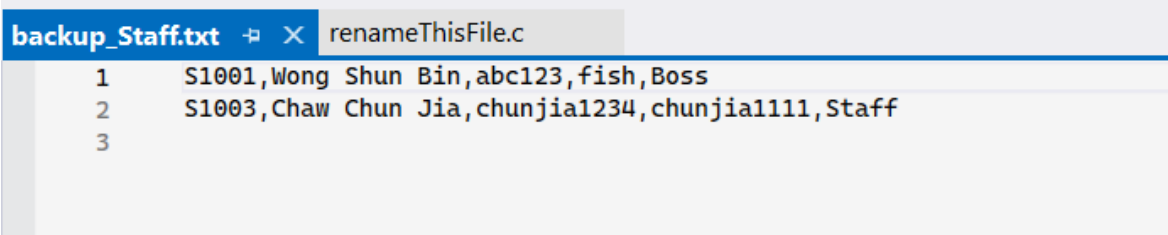
```
=====
Staff Control Panel
=====
```

```
[ 1 ] Add New Staff
[ 2 ] Search Staff Details
[ 3 ] View Staff Details
[ 4 ] Edit Staff Detail
[ 5 ] Delete Staff Detail
[ 6 ] Back up Staff Detail
[ 0 ] Back to menu
```

Enter your choice: 6

```
=====
Back Up Staff Records
=====
```

Do you want to backup staff record (Y/N)?Y



```
backup_Staff.txt  renameThisFile.c
1      S1001,Wong Shun Bin,abc123,fish,Boss
2      S1003,Chaw Chun Jia,chunjia1234,chunjia1111,Staff
3
```

4.2 Member Management by Ooi Jun Kang

4.2.1 Description

The Member Information Module serves as the cornerstone for managing all member-related activities within the train ticketing system. It provides functionalities to add, view, modify, search member information, update member details and password recovery, ensuring accurate and secure storage of member data. This module caters to both administrative needs and member interactions, facilitating smooth operations and personalized services.

4.2.2 Outputs & File Contents

1. Module's Main Page:

Staff Side

```
=====
Member Control Panel
=====

[ 1 ] View all member
[ 2 ] Import member list
[ 3 ] Back up member list
[ 4 ] Enter new member
[ 5 ] Delete member
[ 0 ] Back to menu

Enter your choice:
```

User Side

```
=====
Member Module
=====

[ 1 ] Edit profile
[ 2 ] Buy Ticket
[ 3 ] Modify Booking
[ 4 ] Search Train
[ 5 ] Display Available Train
[ 6 ] Generate Ticket
[ 7 ] Check Booking
[ 0 ] Logout

>>
```

2. **File's Existing Data:** The user selects "Display Member" to view existing member records.

Staff Side

```
=====
Member Control Panel
=====
```

```
[ 1 ] View all member
[ 2 ] Import member list
[ 3 ] Back up member list
[ 4 ] Enter new member
[ 5 ] Delete member
[ 0 ] Back to menu
```

Enter your choice: 1

```
=====
ID      Name          Password      Password Recov  Gender IC          Contact Number
=====
M1001  Khoo Jing Hong  abc123       numbers         M    050614-08-1235  011-7275485
M1002  Ooi Jian Xin   001122      coffee          F    710210-07-2222  017-4453453
M1003  Chaw Chun Jia  okok123     pwrecov         M    202020-20-0202  011-2222222
```

```
[ 1 ] Return to main menu
[ 2 ] Add new member
```

Enter your choice:

member.txt	renameThisFile.c
1	M1001,Khoo Jing Hong,abc123,numbers,M,050614-08-1235,011-7275485
2	M1002,Ooi Jian Xin,001122,coffee,F,710210-07-2222,017-4453453
3	M1003,Chaw Chun Jia,okok123,pwrecov,M,202020-20-0202,011-2222222
4	

3. **Adding a Record:** The user selects "Add Member" and enters the details of the new member.

```
=====
Member Control Panel
=====
```

```
[ 1 ] View all member
[ 2 ] Import member list
[ 3 ] Back up member list
[ 4 ] Enter new member
[ 5 ] Delete member
[ 0 ] Back to menu
```

Enter your choice: 4

```
=====
Enter New Member
=====
Enter ID: M1004
Enter name: Goh Chun Wen
Enter password: abc123
Enter password recovery: abc123
Enter gender (M/F): M
Enter IC: 040412-14-1111
Enter contact number: 011-12345678
Confirm the information (Y/N): Y
Data has been stored in member.txt.
Enter another member? (Y/N): N
```

4. **Modify a Record:** The user select “Modify Member” and edit the field they wanted to edit.

```
=====
Member Module
=====
```

```
[ 1 ] Edit profile
[ 2 ] Buy Ticket
[ 3 ] Modify Booking
[ 4 ] Search Train
[ 5 ] Display Available Train
[ 6 ] Generate Ticket
[ 7 ] Check Booking
[ 0 ] Logout
```

```
>> 1
```

```
=====
Edit Profile
=====
```

```
Name           : Goh Chun Wen
Gender          : M
IC              : 040412-14-1111
Contact Number : 011-12345678
```

```
Edit:
[ 1 ] Name
[ 2 ] Password
[ 3 ] Gender
[ 4 ] IC
[ 5 ] Contact Number
[ 0 ] Exit
>> 3
```

```
Enter new gender: F
```

```
Gender updated successfully.
```

```
=====
Edit Profile
=====
```

```
Name           : Goh Chun Wen
Gender          : F
IC              : 040412-14-1111
Contact Number : 011-12345678
```

```
Edit:
[ 1 ] Name
[ 2 ] Password
[ 3 ] Gender
[ 4 ] IC
[ 5 ] Contact Number
[ 0 ] Exit
>>
```

5. **Deleting a Record:** The user selects “Delete Member” to remove a member from the system.

```
=====
Member Control Panel
=====
```

```
[ 1 ] View all member
[ 2 ] Import member list
[ 3 ] Back up member list
[ 4 ] Enter new member
[ 5 ] Delete member
[ 0 ] Back to menu
```

Enter your choice: 5|

```
=====
Delete Member
=====
```

Enter the ID of the member to delete: M1003

Member found:

Name: Chaw Chun Jia

Gender: M

IC: 202020-20-0202

Contact Number: 011-2222222

Are you sure you want to delete this member? (Y/N): Y|

Member deleted successfully.
Press any key to continue . . . |

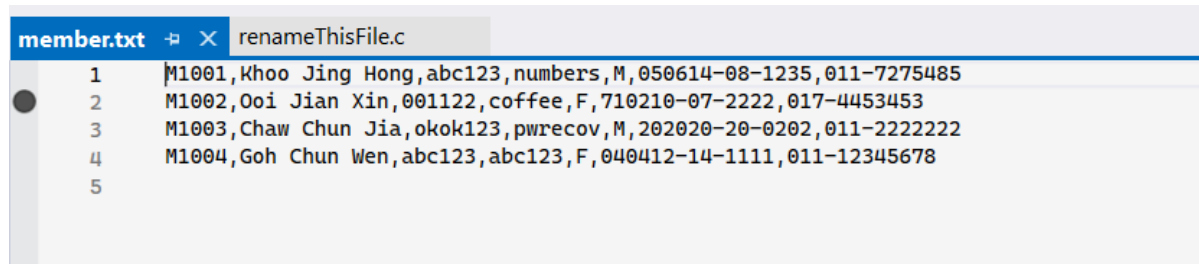
6. **Display File's Updated Data:** After confirmation, the system updates the file with the new member record.

ID	Name	Password	Password Recov	Gender	IC	Contact Number
M1001	Khoo Jing Hong	abc123	numbers	M	050614-08-1235	011-7275485
M1002	Ooi Jian Xin	001122	coffee	F	710210-07-2222	017-4453453
M1003	Chaw Chun Jia	okok123	pwrecov	M	202020-20-0202	011-2222222
M1004	Goh Chun Wen	abc123	abc123	F	040412-14-1111	011-12345678

[1] Return to main menu

[2] Add new member

Enter your choice:



7. **Password Recovery:** Recover password of the member.

```
=====
Password Recovery
=====
```

```
Enter ID: M1001
Enter password recovery term: numbers
Enter new password: *****
Confirm new password: *****
```

```
Password changed successfully.
Enter ID:
```

4.3 Train Scheduling by Chaw Chun Jia

4.3.1 Description

The Train Scheduling Module is pivotal in orchestrating the movement of trains within the train ticketing system. It provides comprehensive functionalities to manage train schedules, including departure and arrival times, destinations, ticket prices, and seat availability. It also allows the user to modify train information of existing trains, display every created train, delete train and view train report. This module ensures efficient utilization of resources and seamless coordination of train services, enhancing the overall travel experience for passengers.

4.3.2 Outputs & File Contents

1. Module's Main Page:

```
=====
Train Scheduling Control Panel
=====

[ 1 ] Add new train for departure
[ 2 ] Search available train
[ 3 ] Modify train information
[ 4 ] Display all train available
[ 5 ] Delete Certain Train
[ 6 ] View Train Report
[ 0 ] Back To Menu

Enter your choice:
```

2. **File's Existing Data:** The user selects "Display Train" to view existing train records.

```
=====
Train Scheduling Control Panel
=====
```

```
[ 1 ] Add new train for departure
[ 2 ] Search available train
[ 3 ] Modify train information
[ 4 ] Display all train available
[ 5 ] Delete Certain Train
[ 6 ] View Train Report
[ 0 ] Back To Menu
```

Enter your choice: 4

All Train Available					
Train ID	Departure Station	Arrival Station	Departure Time	Departure Date	Available Seat
T1001	Subang	Setapak	10:00	12-05-2024	52
T1002	Kepong	Setapak	12:00	11-05-2024	50
T1003	Cheras	Puchong	16:00	30-04-2024	50
T1004	Damansara	Bangsar	14:00	02-05-2024	52

4 record found in file.

Enter 'Y' to return menu.
>>>>>>>>>

- ```
Enter Train ID (eg:T1001) : T1005
Enter Departure Station : KLCC
Enter Arrival Station : KNCC
Enter Departure Time(eg:23:30) : 12:10
Enter Departure Date(eg:31-12-2024): 4-5-2024
Enter Available Seats : 20
```

```
Confirm Your information are correct:
[1] Correct
[2] Incorrect (Re-Enter Again)
[3] Back To Scheduling Menu without saving
>>>>>>>>>> 1
```

Enter more Information? (Press 'Y'):





5. **Deleting a Record:** The user selects “Delete Train” to remove a train from the system.

```
=====
Train Scheduling Control Panel
=====
```

```
[1] Add new train for departure
[2] Search available train
[3] Modify train information
[4] Display all train available
[5] Delete Certain Train
[6] View Train Report
[0] Back To Menu
```

Enter your choice: 5|

| All Train Available |                   |                 |                |                |                |
|---------------------|-------------------|-----------------|----------------|----------------|----------------|
| Train ID            | Departure Station | Arrival Station | Departure Time | Departure Date | Available Seat |
| T1001               | Subang            | Setapak         | 10:00          | 12-05-2024     | 52             |
| T1002               | Kepong            | Setapak         | 12:00          | 11-05-2024     | 50             |
| T1003               | Cheras            | Puchong         | 16:00          | 30-04-2024     | 50             |
| T1004               | Damansara         | Bangsar         | 14:00          | 02-05-2024     | 52             |
| T1005               | KLCC              | KNCC            | 12:10          | 04-05-2024     | 90             |

Enter a Train ID to delete: T1002

Deleting the record...

Record T1002 deleted successfully

Enter 'Y' to delete more or 'N' to return to scheduling menu.

>>>>>>>>>

6. **Display File's Updated Data:** After confirmation, the system updates the file with the new train record.

| All Train Available |                   |                 |                |                |           |      |
|---------------------|-------------------|-----------------|----------------|----------------|-----------|------|
| Train ID            | Departure Station | Arrival Station | Departure Time | Departure Date | Available | Seat |
| T1001               | Subang            | Setapak         | 10:00          | 12-05-2024     |           | 52   |
| T1003               | Cheras            | Puchong         | 16:00          | 30-04-2024     |           | 50   |
| T1004               | Damansara         | Bangsar         | 14:00          | 02-05-2024     |           | 52   |
| T1005               | KLCC              | KNCC            | 12:10          | 04-05-2024     |           | 90   |

4 record found in file.

Enter 'Y' to return menu.

>>>>>>>>>>

**7. Backup Train Scheduled:** Backup the current Train Information into another backup file to prevent lost of data.

```
=====
Train Scheduling Control Panel
=====
```

```
[1] Add new train for departure
[2] Search available train
[3] Modify train information
[4] Display all train available
[5] Delete Certain Train
[6] Backup Train
[0] Back To Menu
```

Enter your choice: 6

| All Train Available |                   |                 |                |                |           |      |
|---------------------|-------------------|-----------------|----------------|----------------|-----------|------|
| Train ID            | Departure Station | Arrival Station | Departure Time | Departure Date | Available | Seat |
| T1001               | Subang            | Setapak         | 10:00          | 12-05-2024     | 52        |      |
| T1003               | Cheras            | Puchong         | 16:00          | 30-04-2024     | 50        |      |
| T1004               | Damansara         | Bangsar         | 14:00          | 02-05-2024     | 52        |      |
| T1005               | KLCC              | KNCC            | 12:10          | 04-05-2024     | 90        |      |

4 record found in file.

```
[1] Backup Current Train to File
[2] Display Current Backup Train
[3] Back To Menu
>> 1
```

Backup Completed

```
[1] Backup Current Train to File
[2] Display Current Backup Train
[3] Back To Menu
>> 2
```

| Train Information |                   |                 |                |                |           |      |
|-------------------|-------------------|-----------------|----------------|----------------|-----------|------|
| Train ID          | Departure Station | Arrival Station | Departure Time | Departure Date | Available | Seat |
| T1001             | Subang            | Setapak         | 10:00          | 12-05-2024     | 52        |      |
| T1003             | Cheras            | Puchong         | 16:00          | 30-04-2024     | 50        |      |
| T1004             | Damansara         | Bangsar         | 14:00          | 02-05-2024     | 52        |      |
| T1005             | KLCC              | KNCC            | 12:10          | 04-05-2024     | 90        |      |

```
[1] Backup Current Train to File
[2] Display Current Backup Train
[3] Back To Menu
>>
```

## 4.4 Ticket Booking by Goh Chun Wen

### 4.4.1 Description

The Ticket Booking Module serves as the primary interface for passengers to reserve and purchase train tickets within the train ticketing system. It provides a user-friendly experience, allowing passengers to buy ticket, modify booking, browse available train schedules, display all available train, generating ticket, and check their booking. This module streamlines the ticket booking process, ensuring convenience and efficiency for passengers while facilitating revenue generation for the railway company.

### 4.4.2 Outputs & File Contents

#### 1. Module's Main Page:

```
=====
Member Module
=====

[1] Edit profile
[2] Buy Ticket
[3] Modify Booking
[4] Search Train
[5] Display Available Train
[6] Generate Ticket
[7] Check Booking
[0] Logout

>>
```

2. **File's Existing Data:** The user selects "Display Available Train" to view available train.

```
=====
Member Module
=====
```

```
[1] Edit profile
[2] Buy Ticket
[3] Modify Booking
[4] Search Train
[5] Display Available Train
[6] Generate Ticket
[7] Check Booking
[0] Logout
```

```
>> 5
```

```
=====
All Trains
=====
```

```
=====
Train ID Departure Station Arrival Station Departure Time Departure Date Available Seat
=====
```

|       |           |         |       |            |    |
|-------|-----------|---------|-------|------------|----|
| T1001 | Subang    | Setapak | 10:0  | 12-05-2024 | 52 |
| T1003 | Cheras    | Puchong | 16:0  | 30-04-2024 | 50 |
| T1004 | Damansara | Bangsar | 14:0  | 02-05-2024 | 52 |
| T1005 | KLCC      | KNCC    | 12:10 | 04-05-2024 | 90 |

```
=====
```

Menu:

```
[1] Buy Ticket(s)
[2] Return to Menu
Enter your choice:
```

3. **Adding a Record:** The user selects "Buy Ticket" to book a train ticket.

Welcome to Ticket Booking Module!

Enter your Departure Station: KNCC

Enter your Arrival Station: KLCC

| Train ID | Departure Station | Arrival Station | Departure Time | Departure Date | Available Seat |
|----------|-------------------|-----------------|----------------|----------------|----------------|
| T1001    | KNCC              | KLCC            | 12:12          | 12-02-2023     | 120            |

Enter Train ID to book: |

Welcome to Ticket Booking Module!

Enter your Departure Station: KNCC

Enter your Arrival Station: KLCC

| Train ID | Departure Station | Arrival Station | Departure Time | Departure Date | Available Seat |
|----------|-------------------|-----------------|----------------|----------------|----------------|
| T1001    | KNCC              | KLCC            | 12:12          | 12-02-2023     | 120            |

Enter Train ID to book: T1001

Enter the number of seats you want: 4|

Total payment will be (RM10 x 4) : RM40.00

Please Select Your Payment Method:

[1]Credit Card

[2]Cash

[3]Ewallet

[4]Cancel Booking

3|

Payment Successful. Your booking details are as below:

Booking ID : B1030

Customer ID : M1001

Customer Name : Khoo Jing Hong

Payment Method : Ewallet

Train ID : T1001

Departure Station : KNCC

Departure Date : 12-02-2023

Departure Time : 12:0212

Seats Booked : 4

Press any key to continue . . . |

4. **Checking a Booking:** The user select “Check Booking” and check the booking they’ve made.

```
=====
Member Module
=====
```

```
[1] Edit profile
[2] Buy Ticket
[3] Modify Booking
[4] Search Train
[5] Display Available Train
[6] Generate Ticket
[7] Check Booking
[0] Logout
```

```
>> 7|
```

```
=====
Check Booking
=====
```

Your bookings:

| Booking ID | Customer ID | Customer Name  | Departure Date | Departure Time |
|------------|-------------|----------------|----------------|----------------|
| B1030      | M1001       | Khoo Jing Hong | 12-2-2023      | 12:12          |

Enter Booking ID to view details (0 to exit to menu): B|

```
=====
Check Booking
=====
```

Your bookings:

| Booking ID | Customer ID | Customer Name  | Departure Date | Departure Time |
|------------|-------------|----------------|----------------|----------------|
| B1030      | M1001       | Khoo Jing Hong | 12-2-2023      | 12:12          |

Enter Booking ID to view details (0 to exit to menu): B1030

Booking ID: B1030  
Customer ID: M1001  
Customer Name: Khoo Jing Hong  
Payment Method: Ewallet  
Train ID: T1001  
Departure Station: KNCC  
Departure Date : 12-2-2023  
Departure Time : 12:12  
Requested Seats : 4  
Enter Booking ID to view details (0 to exit to menu): B|



5. **Cancelling a booking:** The user selects “Modify Booking” to modify a booking they’ve made.

```
=====
Member Module
=====
```

```
[1] Edit profile
[2] Buy Ticket
[3] Modify Booking
[4] Search Train
[5] Display Available Train
[6] Generate Ticket
[7] Check Booking
[0] Logout
```

```
>> 3|
```

Your bookings:

```
=====
Booking ID Customer ID Customer Name Departure Date Departure Time
=====
B1030 M1001 Khoo Jing Hong 12-05-2024 10:0
B1031 M1001 Khoo Jing Hong 11-05-2024 12:0
Select booking to be modified (0 to cancel): B1030
Enter new number of seats (0 to delete): 0
Booking deleted successfully.
Press any key to continue . . . |
```

6. **Display File's Updated Data:** After confirmation, the system updates the file with the new Booking record.

```
=====
Check Booking
=====
```

Your bookings:

| Booking ID | Customer ID | Customer Name  | Departure Date | Departure Time |
|------------|-------------|----------------|----------------|----------------|
| B1031      | M1001       | Khoo Jing Hong | 11-5-2024      | 12:0           |

Enter Booking ID to check details (0 to exit): B|

**7. Search Train availability:** Search for train with departure and arrival station

=====  
Search Train  
=====

Enter your Departure Station: KLCC  
Enter your Arrival Station: KNCC

```
=====
Train ID Departure Station Arrival Station Departure Time Departure Date Available Seat
=====
T1005 KLCC KNCC 12:10 04-05-2024 90
Press any key to continue . . .
```

## References

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3. *C library function - rewind()*. (n.d.). Tutorialspoint. Retrieved May 5, 2024, from [https://www.tutorialspoint.com/c\\_standard\\_library/c\\_function\\_rewind.htm](https://www.tutorialspoint.com/c_standard_library/c_function_rewind.htm)
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