



AACS1084

Programming Concepts & Design II

Assignment 2024

Programme	:	Diploma In Information Technology
Tutorial Group	:	6
Date Submitted to Tutor	:	3/5/2024

Team Members:





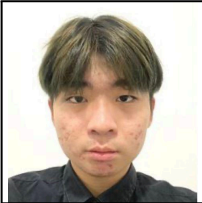



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Task Allocation

No.	Team Member	Task(s) Allocated	Overall Contribution (%)
1.	KER ZHENG FENG	Scheduling Module	25%
2.	GAN KA CHUN	Member Module	25%
3.	TAN JIN YUAN	Admin Module	25%
4.	PATRICIA LEE HUAY	Booking 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 is our own properly derived work.

Signature :				
Name :	KER ZHENG FENG	GAN KA CHUN	TAN JIN YUAN	PATRICIA LEE HUAY
Photo :				
Date :	3/5/2024	3/5/2024	3/5/2024	3/5/2024

Assignment Evaluation Form

Student Name	KER ZHENG FENG	GAN KA CHUN	TAN JIN YUAN	PATRICIA LEE HUAY
Module handled	Schedule	Member	Staff	Booking
Assessment Criteria	Marks Awarded			
Application of Programming Knowledge				
<u>Structures</u> • Basic + extra fields, • Use of nesting & arrays • Appropriate usage	12			
<u>File Processing</u> • successful processing • Validation of data • Appropriate usage	12			
<u>Functions</u> • 4 Basic file fns, • Extra file fns, useful/correct • Approp. menu design & process	12			
<u>Others</u> • Use of parameters; correct usage • Subsidiary working functions • Minimized global variables	12			
<u>Teamwork</u> • Main menu, logo etc • System/module integration • Report integration/content • Sharing of files, functions • Communication, cooperation	12			
<u>Program originality, efficiency and readability</u> • Innovation, uniqueness • Approp. logic structures • Code Readability	10			
<u>Report (indiv. section)</u> • Clarity of description • Narrated Screens for all processes (basic + extra)	20			
<u>Penalty - Late Submission</u> • 1-3 days late □ -10 • 4-7 days late □ -20 >7 days late => Total mark = 0				
Subtotal (i)				
<u>Presentation</u> • Organization, explanation • Enthusiasm, preparedness, attitude, understanding • Q&A handling Subtotal (ii)	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

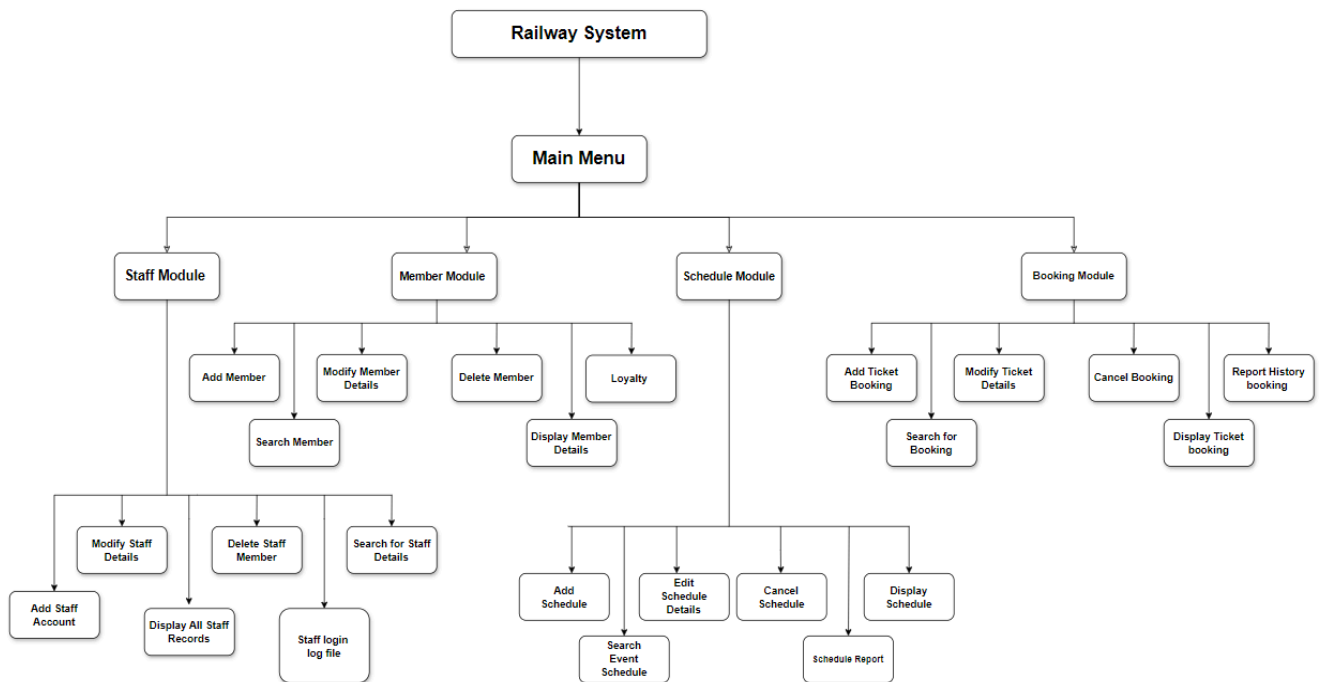
In this assignment, we have developed a system in C to simulate the daily operations of a ticketing system. Assuming our system is designed for “*RapidEkspres*”, a train service company, it consists of 4 main modules, namely Staff, Member, Booking and Scheduling, each performing different functions from another.

Each function would be able to conduct file functions, such as creating, reading, updating and deleting data from files, which may vary between binary and text files. For instance, the staff module would be able to read staff details/ credentials from the staff binary file and print it out on the user interface.

Other than the file functions stated above, we have also included 2 other functions that we believe may bring ease to the user. For example, the booking module can generate a report based on the bookings made by members, this function may be useful to staff to get an overview of ticket bookings.

More detailed information regarding the system’s modules and its submodules will be explained in the upcoming sections.

2.0 Overall System – Module Structure Chart



3.0 Main Screen Design

Brief Description:

Displays the company logo/banner.

Consists of the main 4 options (modules) to choose from.

- Staff
- Member
- Booking
- Scheduling
- Exit Program

Invalid input will be rejected by the system. (e.g. system prompts a number from 1-3, but the user enters 's')

Sample photos:

```

=====
||_// |||=|| ||_// || || ) ||== ||<< ( ( ||_// ||_// ||== ( (
|| \ \ || || ||_// || ||_// || \ \ \ ) || \ \ ||_// \ )
=====

Welcome to RapidEkspres! Choose a Function

1. Staff
2. Member
3. Booking
4. Scheduling
5. Exit Program

--> s|

```

Invalid Selection! Try again.

```
=====
||_// |||=| ||_// || ||_) ||== ||<= ||( ||_// ||_// |||= ||(
||\ \ || | ||_| ||_// ||__ ||\ \ \)) ||_| ||\ \ ||__ \))

=====
Welcome to RapidEkspres! Choose a Function

1. Staff
2. Member
3. Booking
4. Scheduling
5. Exit Program

--> |
```


4.0 System Modules

4.1 Staff Module by Tan Jin Yuan

4.1.1 Brief Description Staff

Before accessing this module from the main menu, the user is required to enter a specific PIN specified by the system as a means of authentication and prevent unauthorised access.

Once logged in, the staff module has 6 different functions for the user to choose from, namely:

- Creating A New Staff Record
 - The user (unregistered staff) enters his unique staff ID, name, password, password recovery PIN, date of employment, unique work/contact email as well as the work department. Additionally registration as “Administration” (system admin) is prohibited to ensure data integrity.
- Viewing Staff Credentials
 - This is an Administration Staff-only function where logging in as an Administration Staff is required. Once logged in, each staff record in the staff file will be displayed, including all relevant information such as password, recovery PIN and email address is displayed.
- Searching For Staff
 - Staff can search for any records within the system by providing a search criteria, including, name, staff ID, email or work department. Search results will be displayed to the user if found.
- Deleting A Staff Record
 - If a staff member wants to delete his/her record, they need to log in by entering his ID and password. When entered successfully, the system will prompt the name and ID of the user and ask for confirmation once. If confirmed, the staff member’s record will proceed to be deleted. Otherwise, the system will return to the staff main page.
- Editing Staff Details
 - Staff ID and password login are needed to access this module before proceeding to allow profile editing. Staff members can choose what to edit such as work department or email. When satisfied, the user saves all changes to the file and exits.
- Checking The Staff Log File
 - Track all staff activities (e.g. search records, add records, delete records, system login). The system will show the latest change made to the file and display out to the user.

4.1.2 Outputs & File Contents

Access to the staff module is guarded by a PIN.

```
=====
||_// ||=|| ||_// || ||_> ||== ||<= ||_// ||_// ||== ||_
||\ \ || || ||_// || ||_// ||_ \ \ \ ||_ ||_ \ \ ||_ \ \
=====
Welcome to RapidEkspres! Choose a Function

1. Staff
2. Member
3. Booking
4. Scheduling
5. Exit Program

--> 1
You chose Staff.
Enter admin PIN to continue: 8888|
```

Homepage of the staff menu once logged in.

```
=====
                Staff Menu
=====
1. Create Staff
2. View Staff Credentials (ADMIN only)
3. Search for Staff
4. Delete a Staff Record
5. Edit Staff Details
6. Check Log File

7. RETURN TO MENU
=====
Your Choice: |
```

Function 1: Creating a New Staff Record

Validation is applied when creating a new staff record. For example, it should not be possible for the user to register with a staff ID that is already PRESENT in the file. No duplicate email is also allowed, either.

```
=====
Register a Staff Account
=====
NOTE: Changing of Staff ID is prohibited after to prevent spoof records

No of records: 10
Enter X to exit, or enter your staff ID to continue(e.g.: A0001): A00001
ERROR: ID already exists!
```

```
=====
Register a Staff Account
=====
NOTE: Changing of Staff ID is prohibited after to prevent spoof records

No of records: 10
Enter X to exit, or enter your staff ID to continue(e.g.: A0001): A0011
Enter staff full name :Klay Thompson
Enter a suitable password: klylim88
Enter a 4-digit recovery pin: 6789
Enter your date of employment (DD/MM/YYYY) : 5/8/2011
Enter an email: klaythompson@gmail.com
Enter your current department (e.g Finance): Finance
Successfully added records. Your admin PIN is 8888
Press any key to continue . . . |
```

File before adding a new record:

admin.dat			
File	Edit	View	
A00001	Kenneth Tan	ktn@557	” Ü
kennethtan@gmail.com	Administration	000605mkw	N\$ Ñ
A0003	Mikey Wong	xy88888888	³ Ú
mikeywong@hotmail.com	Scheduling	sweethin97	¹ ä
A0007	Xinyi Lee	sunny1123	Ò â
xinyilee@gmail.com om	Scheduling	leong0623	lee6410
A0002	Lim Swee Thin	Marketing	kowkow2333
sweethin97@yahoo.com	Ticketing	waikit001	i% P
A0006	Yuan Hung	Engineering	A@ron11m
yuanhung@outlook.com	Ticketing	Customer Service	
A0005	Ng Wei Leong		
â yuan@outlook.com			
A0004	Ivan Lee		
ivanlee@hotmail.com			
A0008	Tan Ah Kow		
ahkowtan@yahoo.com			
A0009	Wai Kit Choong		
waikit001@outlook.com			
A0010	Aaron Lim		
aaronlim@gmail.com			

File after adding a new record (updated data)

File	Edit	View	
A00001	Kenneth Tan	ktn@557	” Ü
kennethtan@gmail.com	Administration	000605mkw	N\$ Ñ
Mikey Wong	A0003	xy88888888	³ Ú
Scheduling	mikeywong@hotmail.com	sweethin97	¹ ä
A0007	Xinyi Lee	sunny1123	Ò â
xinyilee@gmail.com om	Scheduling	leong0623	lee6410
A0002	Lim Swee Thin	Marketing	kowkow2333
sweethin97@yahoo.com	Ticketing	waikit001	i% P
A0006	Yuan Hung	Engineering	A@ron11m
yuanhung@outlook.com	Ticketing	Customer Service	
A0005	Ng Wei Leong		
â yuan@outlook.com			
A0004	Ivan Lee		
ivanlee@hotmail.com			
A0008	Tan Ah Kow		
ahkowtan@yahoo.com			
A0009	Wai Kit Choong		
waikit001			
waikit001@outlook.com			
A0010	Aaron Lim		
aaronlim@gmail.com			
Klay Thompson			
Finance			

Function 2: Viewing staff credentials

The user should log in as “Administration staff” to continue.

```
C:\Users\KTY\A\Desktop\G6Tar  X  +  v

=====
                Staff Menu
=====
1. Create Staff
2. View Staff Credentials (ADMIN only)
3. Search for Staff
4. Delete a Staff Record
5. Edit Staff Details
6. Check Log File

7. RETURN TO MENU
=====
Your Choice: 2
Login as ADMINISTRATOR staff to continue. <id> <password> :A00001 ktn@557|
```

Complete staff record information is shown. (only 4 are shown in this screenshot)

```
=====
                Staff Credentials
=====
+-----Staff 01-----+
Name : Kenneth Tan
ID   : A00001
Email: kennethtan@gmail.com
Working in Administration Department since 3/3/2012

PASSCODE: ktn@557 7572
+-----+

+-----Staff 02-----+
Name : Mikey Wong
ID   : A0003
Email: mikeywong@hotmail.com
Working in Scheduling Department since 4/6/2001

PASSCODE: 000605mkw 9294
+-----+

+-----Staff 03-----+
Name : Xinyi Lee
ID   : A0007
Email: xinyilee@gmail.com
Working in Scheduling Department since 9/1/2010

PASSCODE: xy88888888 5555
+-----+

+-----Staff 04-----+
Name : Lim Swee Thin
ID   : A0002
Email: sweethin97@yahoo.com
Working in Ticketing Department since 17/12/2020

PASSCODE: sweethin97 2233
+-----+
```

Function 3: Searching for staff

The user should be able to enter a search query. Search Results are displayed on the screen.

```
=====
      Search for Staff
=====
There are 11 staff.

Enter something to search (Name,ID,Email,Department): A0011
Name : Klay Thompson
ID   : A0011
Email: klaythompson@gmail.com
Working in Finance Department since 5/8/2011

1 record(s) found.
Search again? (Y/N, Default is No) :|
```

An error message is displayed when the results found are 0.

```
=====
      Search for Staff
=====
There are 11 staff.

Enter something to search (Name,ID,Email,Department): idk

No records found!!!!
Search again? (Y/N, Default is No) :|
```

Function 4: Deleting staff record

Once the staff is logged in, the system prompts for double confirmation before deleting the record of the logged-in user (staff).

To confirm, the user should type in 'DELETE', else the system will return the user to the staff main menu.

```
=====
      Delete a Staff Record
=====
You must be logged in to continue.
Enter your ID and Password. ( Type "<id> <password>" )
(e.g: NMB01 abcxyz) :A0011 klylim88
Are you sure you want to delete Klay Thompson's record (A0011)?
(type "DELETE" to confirm): NOPLS
You chose not to delete. Returning to menu...
Press any key to continue . . . |
```

Otherwise, when confirmation is successful, the staff record is permanently deleted from the staff file.

```
=====
Delete a Staff Record
=====
You must be logged in to continue.
Enter your ID and Password. ( Type "<id> <password>" )
(e.g: NMB01 abcxyz) :A0011 klylim88
Are you sure you want to delete Klay Thompson's record (A0011)?
(type "DELETE" to confirm): DELETE
Deleting...
Sucessfully deleted 1 record. (A0011)
Press any key to continue . . . |
```

Updated contents of staff file. (Deleted 1 record)

admin.dat			
File	Edit	View	
<pre> A00001 Kenneth Tan ktn@557 "Ü Ü Ü kennethtan@gmail.com Administration A0003 Mikey Wong 000605mkw N\$ Ñ Ü Ü mikeywong@hotmail.com Scheduling A0007 Xinyi Lee Scheduling xy88888888 ³Ü Ü xinyilee@gmail.com om A0002 Lim Swee Thin sweethin97 ¹ ä Ü sweethin97@yahoo.com Ticketing A0006 Yuan Hung sunny1123 Ö â Ü Ü yuanhung@outlook.com Ticketing A0005 Ng Wei Leong leong0623 Ü â Ü Ü yuan@outlook.com Ticketing A0004 Ivan Lee lee6410 ÜÜ Ö Ü ivanlee@hotmail.com Marketing A0008 Tan Ah Kow kowkow2333 8 ä Ü Ü ahkowntan@yahoo.com Sales A0009 Wai Kit Choong waikit001 ;% p Engineering waikit001@outlook.com A@ron1lm ...Ü Ü Ü A0010 Aaron Lim Customer Service aaronlim@gmail.com </pre>			

Function 5: Editing staff record

Staff login is required to edit a staff record. If a user fails to log in within 3 attempts, he/she can use the recovery PIN set during staff creation to log in, but her/his ID must match it. If this last login attempt fails, the user is returned to the menu.

```
=====
      Edit Staff Account
=====
You must be logged in to continue.
Enter your ID: A00AS
Enter your Password: SD
Login failed.

Enter your ID: SD
Enter your Password: SD
Login failed.

Enter your ID: SD
Enter your Password: SD
Login failed.

Multiple failed login attempts. Do you want to sign in with password recovery?
(Y to accept, other key to exit) :|
```

User can choose to edit all his/her staff details except STAFF ID as it is unique

```
-----
You are logged in.....
Your user details
: Klay Thompson A0011 --- klaythompson@gmail.com
Currently working in Finance Dep since 5 Aug 2011
-----

1. Change Password and Update Recovery PIN
2. Change Name
3. Change Department
4. Change Hire Date
5. Change Email

0. SAVE CHANGES AND EXIT

NOTE: Changing of User ID is forbidden.
--->|
```

Example: Assuming “Klay Thompson” changed his name to “Klay Tan” and saved changes

```
-----
You are logged in....
Your user details
: Klay Tan A0011 --- klaythompson@gmail.com
Currently working in Finance Dep since 5 Aug 2011
-----
1. Change Password and Update Recovery PIN
2. Change Name
3. Change Department
4. Change Hire Date
5. Change Email

0. SAVE CHANGES AND EXIT

NOTE: Changing of User ID is forbidden.
--->0
Exiting..

Sucessfully saved all changes.
Press any key to continue . . . |
```

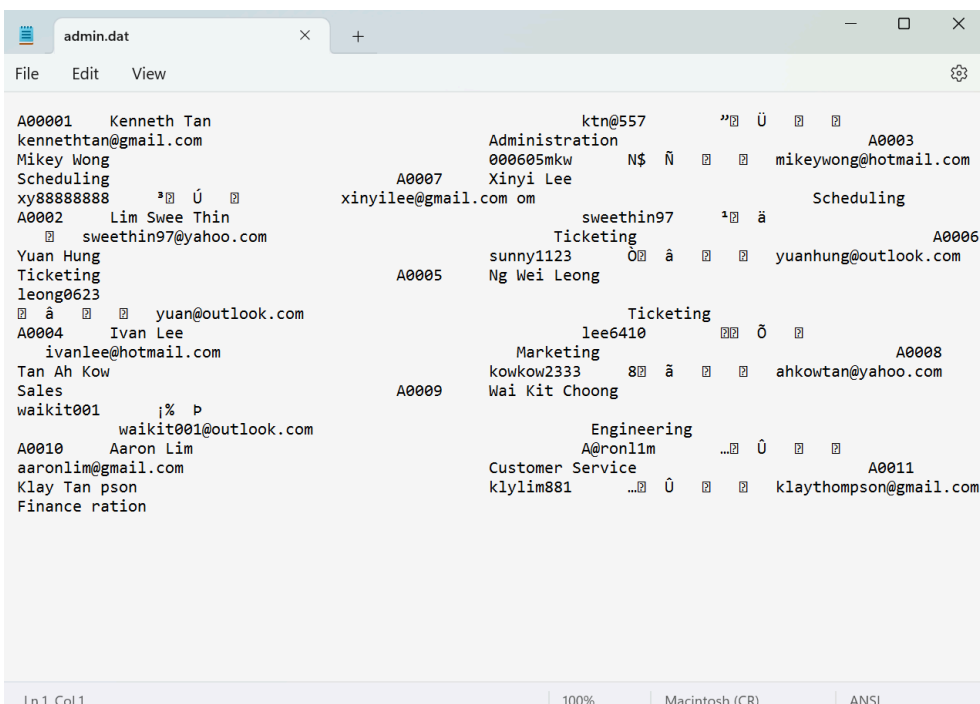
By searching in the new name, it shows results, confirming that the changes were indeed successful.

```
=====
      Search for Staff
=====
There are 11 staff.

Enter something to search (Name,ID,Email,Department): Klay Tan
Name : Klay Tan
ID   : A0011
Email: klaythompson@gmail.com
Working in Finance Department since 5/8/2011

1 record(s) found.
Search again? (Y/N, Default is No) :|
```

admin.dat after updating.

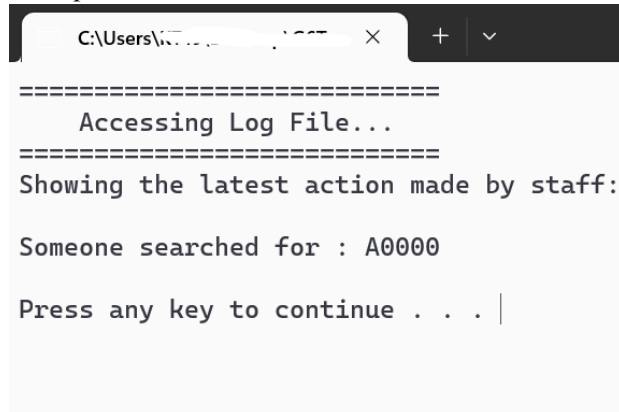


ID	Name	Email	Department
A00001	Kenneth Tan	kennethtan@gmail.com	Administration
A00003	mikeywong@hotmail.com	mikeywong@hotmail.com	Administration
A00007	Xinyi Lee	xinyilee@gmail.com	Scheduling
A00002	Lim Swee Thin	sweethin97@yahoo.com	Ticketing
A00005	Yuan Hung	yuanhung@outlook.com	Ticketing
A00004	Ivan Lee	ivanlee@hotmail.com	Marketing
A00009	Tan Ah Kow	ahkowitz@yahoo.com	Marketing
A00010	Aaron Lim	aaronlim@gmail.com	Customer Service
A00011	Klay Tan pson	klaythompson@gmail.com	Finance ration

Function 6: Staff Log file

The staff log file stores the first latest action. Actions that will be stored include searching, deleting, modifying, creating, and logging in to other modules.

Example: When someone searches for staff 'A0000':



```
C:\Users\K...>logadmin
=====
Accessing Log File...
=====
Showing the latest action made by staff:

Someone searched for : A0000

Press any key to continue . . . |
```

Example: When staff 'A0011' changed his/her details;

```
=====
Accessing Log File...
=====
Showing the latest action made by staff:

Attempted to change his/her details : A0011

Press any key to continue . . . |
```

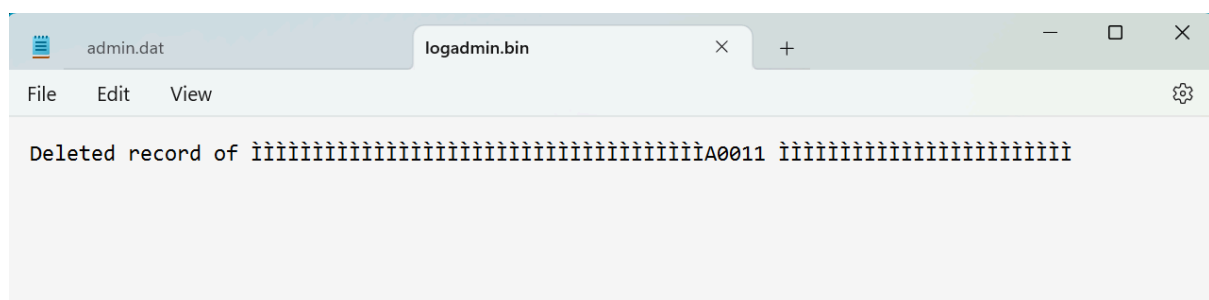
Example: When staff 'A0011' changed his/her details;

```
=====
Accessing Log File...
=====
Showing the latest action made by staff:

Deleted record of : A0011

Press any key to continue . . . |
```

Sample of contents inside the log file (logadmin.bin)



```
admin.dat  logadmin.bin
File Edit View
Deleted record of ~~~~~~A0011 ~~~~~~
```

Above concludes all 4 basic functions (add, search, modify, display) with 2 additional functions (staff log file, delete) for the admin module.

4.2 Member Module by Gan Ka Chun

For our member modules, we had 6 different functions that included add member, which is register, search for member, display member details, delete member, edit member and loyalty. For the search for member and display member details function, it required staff login while the others function such as edit member, delete member and loyalty required member to login with their username and password.

Members may input Member ID, member username, password, email, contact number and IC number. After inputting every data, the system will prompt member registration successfully. Members need to log in with their username and password. When entered successfully, members will be redirected to the userpage.

Once they enter the userpage, they can select different functions such as check on their account details, edit their account, delete their account and also check their loyalty point while having a look at what rewards they could exchange with their loyalty points.

When member wanted to edit their account, they can choose the edit account details function. After they had chosen it, the system will redirect them to the page and let them to edit their account. While they are editing, all the information must be different with their current account or else the system will prompt them to change it to prevent any safety or privacy problem.

When members want to delete their account, they need to enter their username and password for confirmation. After they have entered it, there will be a double confirmation to make sure that they are seriously wanting to delete their account.

Lastly, members can check on their account details and loyalty points just by one click and the system will redirect them to it.

4.2.2 - Module's main page

```
=====
|                                     |
|               M E M B E R         |
|                                     |
=====

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: |
```

This is the main page before members login. They can do login and register here. Staff can go through the search member and display members details function with their login.

```
Login successful. |
=====
Welcome! |Ho|

-----
|      1. Your Account Details      |
|      2. Edit Account Details      |
|      3. Delete Your Account       |
|      4. Loyalty Point             |
|      5. Logout                    |
|-----|

Enter your selection: |
```

After members have logged into their account, the system will redirect them to this user page, which provides other functions for members.

```
1      M001 Roy Wk@roy861 gg@gmail.com 601234567 050326-14-6969 10
2      M002 Ho@3344 ho@gmail.com 6012333333 050403-13-0543 40
3      M102 Loh Kar Yee@abcxyz lohxxx@gmail.com 60123456789 050920-08-1217 10
4      M103 Winnikam@winni888 winnik@gmail.com 60134486545 050008-11-3333 0
5      M124 Chan Mei Mei@gan8888 gan@gmail.com 60123387777 050008-11-3334 10
6      M125 Panda Ho@ho040608 panda@gmail.com 60178006622 050008-11-3335 0
7      M126 Patricia@patricia777 patriciah@outlook.com 60145558111 050008-11-3336 10
8      M127 Felix Ker@Lixxx felixkzf@gmail.com 60194566477 050708-11-3337 20
9      M128 Peter Pan@pan8888 panpt@gmail.com 601118886622 050008-11-3338 10
10     M174 Mark Wong@mkw2222 mkw222@yahoo.com 60147955811 050008-11-3339 10
11
```

This is our members text file.

4.2.2.1 - Add Member(Register)

```
=====
|                                     |
|               M E M B E R         |
|                                     |
=====

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: 2|
```

User can enter 2 to register themselves as a member

```
=====
|                                     |
|               R E G I S T E R     |
|                                     |
=====

Enter Member ID(M000-M999): M001|
```

Here is an example while a user is doing their registration. It will be the same for other input data fields which are username, password, email, contact number, IC number.

```
-----
Member added successfully.
-----

=====
|                                     |
|               M E M B E R         |
|                                     |
=====

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: |
```

After the user has done all the information input for the registration, the system will prompt 'Member added successfully'. Now they can proceed to login.

After registering, we can see that M209 Roygan has been added to the text file.

```
=====
|                                     |
|               M E M B E R         |
|                                     |
|=====|
1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: 3
Login as ANY staff to continue.
Enter <id> <password> :A0003 000605mkw
Logged in successfully as Mikey Wong.
Enter the username to search for: Roygan|
```

```
=====
Member ID: M209
Username: Roygan
Password: roygan861
Email: roygan@gmail.com
Contact Number: 60123446572
IC Number: 050426-14-9087
Loyalty point: 0
=====

Press any key to continue . . . |
```

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Function 2: Display Member Details

```
=====
|                                     |
|               M E M B E R         |
|                                     |
=====

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: 4
Login as ANY staff to continue.
Enter <id> <password> :A0003 000605mk|
```

Staff can enter 4 to login and display all members' details.

```
Logged in successfully as Mikey Wong.
=====
Member ID: M001
Username: Roy Wk
Password: roy861
Email: gg@gmail.com
Contact Number: 601234567
IC Number: 050326-14-6969
Loyalty point: 10
=====

=====
Member ID: M002
Username: Ho
Password: 3344
Email: ho@gmail.com
Contact Number: 6012333333
IC Number: 050403-13-0543
Loyalty point: 40
=====

=====
Member ID: M102
Username: Loh Kar Yee
Password: abcxyz
Email: lohxxx@gmail.com
Contact Number: 60123456789
IC Number: 050920-08-1217
Loyalty point: 10
=====
```

Here is a part of the result from the display members details.

Function 3: Member Check Their Own Details

```
=====
|                                     |
|               M E M B E R         |
|                                     |
=====

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

Enter your choice: 1|
```

Users can enter 1 to login themselves into their member account. After login, it will redirect them to the userpage.

```
=====
|                                     |
|               L O G I N           |
|                                     |
=====

Enter username: Roygan
Enter password: roygan861|
```

Users enter their username and password for the system to validate and log in into their account.

```
Login successful.|
=====
Welcome! |Roygan|
=====
| 1. Your Account Details |
| 2. Edit Account Details |
| 3. Delete Your Account  |
| 4. Loyalty Point        |
| 5. Logout               |
|                         |
=====

Enter your selection: 1|
```

After login, users can enter 1 to check their account details.

```
=====
|                               |
|           D E T A I L S     |
|                               |
|=====|
| Your Member ID: M209        |
| Your Username: Roygan       |
| Your Password: HIDDEN      |
| Your Email: roygan@gmail.com|
| Your Contact-Num: 60123446572|
| Your IC-Num: HIDDEN        |
| Your loyalty points: 0      |
|=====|
Press any key to continue . . . |
```

Their details will be displayed to them but cause to privacy issues ,the system will hidden their password and IC num.

Function 4: Member Edit Their Account Details

```
Welcome! |Roygan|
=====
| 1. Your Account Details    |
| 2. Edit Account Details    |
| 3. Delete Your Account     |
| 4. Loyalty Point           |
| 5. Logout                  |
|=====|
Enter your selection: 2|
```

After login,users can enter 2 to edit their account details.

```
=====
|                               |
|           E D I T           |
|                               |
|=====|

Enter new username: Roy2077
Enter new password: dad2077
Enter new Email: roy2077@gmail.com
Enter new Contact Number: 60137862077
Your information have been changed.
Press any key to continue . . . |
```

Users enter their new account details.Member ID and IC Number are not allowed to edit or change.

1	M001 Roy Wk@roy861 gg@gmail.com 601234567 050326-14-6969 10
2	M002 Ho@3344 ho@gmail.com 6012333333 050403-13-0543 40
3	M102 Loh Kar Yee@abcxyz lohxxx@gmail.com 60123456789 050920-08-1217 10
4	M103 Winnikam@winni888 winnik@gmail.com 60134486545 050008-11-3333 0
5	M124 Chan Mei Mei@gan8888 gan@gmail.com 60123387777 050008-11-3334 10
6	M125 Panda Ho@ho040608 panda@gmail.com 60178006622 050008-11-3335 0
7	M126 Patricia@patricia777 patriciah@outlook.com 60145558111 050008-11-3336 10
8	M127 Felix Ker@Lixxx felixkzf@gmail.com 60194566477 050708-11-3337 20
9	M128 Peter Pan@pan8888 panpt@gmail.com 601118886622 050008-11-3338 10
10	M174 Mark Wong@mkw2222 mkw222@yahoo.com 60147955811 050008-11-3339 10
11	M209 Roy2077@dad2077 roy2077@gmail.com 60137862077 050426-14-9087 0
12	

Now we can see that the M209 Roygan details have been changed.

Function 5: Member Delete Their Account

Welcome! |Roy2077|

- | |
|-------------------------|
| 1. Your Account Details |
| 2. Edit Account Details |
| 3. Delete Your Account |
| 4. Loyalty Point |
| 5. Logout |

Enter your selection: 3|

After login,users can enter 3 to delete their account.

```
=====
|               |
|       D E L E T E       |
|               |
|=====|
```

Enter your username for confirmation: Roy2077

Enter the password for confirmation: dad2077

Are you sure you want to delete the account? (Y/N): Y|

Users are required to enter their username and password for confirmation.After that,the system will prompt to ask again for a double confirmation to delete the member account.

| Delete Successful! |

```
=====
|               |
|       M E M B E R       |
|               |
|=====|
```

1. Login
2. Register
3. Search Member
4. Display Members Details
5. Exit

After members confirm the deletion, the system will prompt 'Delete Successful!' and the user will be returned back to the main page.

```

1      M001 Roy Wk@roy861 gg@gmail.com 601234567 050326-14-6969 10
2      M002 Ho@3344 ho@gmail.com 6012333333 050403-13-0543 40
3      M102 Loh Kar Yee@abcxyz lohxxx@gmail.com 60123456789 050920-08-1217 10
4      M103 WinniKam@winni888 winnik@gmail.com 60134486545 050008-11-3333 0
5      M124 Chan Mei Mei@gan8888 gan@gmail.com 60123387777 050008-11-3334 10
6      M125 Panda Ho@ho040608 panda@gmail.com 60178006622 050008-11-3335 0
7      M126 Patricia@patricia777 patriciah@outlook.com 60145558111 050008-11-3336 10
8      M127 Felix Ker@Lixxx felixkzf@gmail.com 60194566477 050708-11-3337 20
9      M128 Peter Pan@pan8888 panpt@gmail.com 601118886622 050008-11-3338 10
10     M174 Mark Wong@mkw2222 mkw222@yahoo.com 60147955811 050008-11-3339 10
11

```

After deletion, the M209 Roy2077 had been removed from the txt file.

Function 6: Member check their loyalty point and have a look of the rewards

```

Login successful. |
=====
Welcome! |Ho|
-----
|      1. Your Account Details      |
|      2. Edit Account Details      |
|      3. Delete Your Account       |
|      4. Loyalty Point              |
|      5. Logout                    |
-----
Enter your selection: 4|

```

After login, users can enter 4 to check their account loyalty point and have a look the rewards they can exchange at the train station or the train canteen cabin.

```

=====
|      R E W A R D      |
|=====|
Your loyalty points: 40
Please exchange your reward at our train counter/train canteen cabin
Reward List:

=====
|Maggi Curry: 100pt   Nasi Lemak: 250pts   Nescafe: 80pts   |
|Milo Ais: 100pt     Mee Mamak: 170pts   Singapore MeeHun: 280pts|
|Chicken Rice:200pt  Nasi Goreng:350pts  RM15 Voucher: 580pts|
=====
Press any key to continue . . . |

```

here members can check how many loyalty points they had and how much the rewards cost.

4.3 Schedule Module By Ker Zheng Feng

4.3.1 Brief Description Scheduling

About the schedule module has 6 different function that included add schedule record , display schedule record , search schedule , edit schedule record , delete schedule record and generate schedule report . This module is allow staff to add schedule record for member ..

- Add Schedule
 - Staff may input train ID , departure time , arrival time , departure from , destination , date and train price for adding the record into binary file
- Display Schedule
 - After input every data , schedule record will be prompt by binary file to let staff confirm their record .
- Edit Schedule
 - If staff founded some error information on the record . They can search Train ID or Destination for editing . When the train ID or destinaion is equal to the data from binary file . The information will been displayed and ask staff for the editing confirmation . If yes , staff can input a new record to replace the error record . If no , staff will exit from the function .
- Search Schedule
 - When staff want to view the record , staff can search the train record by entering its train ID or destination . Record will be fetch out from binary file and display for staff .
- Delete Schedule
 - When the record is expired , staff can search train ID or destination for delete . The train record will display and staff will get a confirmation for deleting the record . If yes , the train record will be deleted . If no , staff will exit from the function .
- Schedule Report
 - Lastly , staff can generate a schedule report about the total of train and amount train that will arrive each destination . It is to let staff know each station will arrive how many train .

4.3.2 - Module's main page

```
=====
  Train Schedule
=====

1. Write Train Schedule
2. Read Train Schedule
3. Edit Train Schedule
4. Search Train Schedule
5. Delete Train Schedule
6. Generate Schedule Report
7. Exit

Please Enter Your Selection :1
```

Function 1: Add Schedule Function

Staff can enter train ID , departure time , arrival time , departure location , destination , date and price . When data were entered , staff can enter 'Y' or 'y' for adding another record .

```
Station Code For Destination ...

TGM = Tanjung Malim
KKB = Kuala Kubu Bharu
RAS = Rasa
BTK = Batang Kali
SRH = Serendah
KUG = Kuang
SGB = Sungai Buloh

Enter Train ID = T001
Enter Departure Time = 12.00
Enter Arrival Time = 13.00
Enter Departure From = KKB
Enter Destination = SGB
Enter Date ( DD-MM-YYYY ) = 11-1-2024
Enter Price = 12.50

Any Record ? ( Y / N ) :N

Press any key to continue . . . |
```

Function 2: Display Schedule Function

Staff will enter '2' for displaying the record that entered by them , every details of the train record will be displayed on the screen for staff

Station Code For Destination ...

TGM = Tanjung Malim
KKB = Kuala Kubu Bharu
RAS = Rasa
BTK = Batang Kali
SRH = Serendah
KUG = Kuang
SGB = Sungai Buloh

Train ID = T001
Train Departure Time = 13.00
Train Arrival Time = 14.00
Train Departure From = KKB
Train Destination = RAS
Train Date = 21-3-2024
Train Price = 14.50

Train ID = T002
Train Departure Time = 21.00
Train Arrival Time = 21.30
Train Departure From = SGB
Train Destination = KUG
Train Date = 2-3-2024
Train Price = 15.50

Train ID = T003
Train Departure Time = 22.30
Train Arrival Time = 23.00
Train Departure From = TGM
Train Destination = KKB
Train Date = 21-4-2024
Train Price = 16.50

Train ID = T004
Train Departure Time = 1.20

Train ID = T004
Train Departure Time = 1.20
Train Arrival Time = 2.00
Train Departure From = SGB
Train Destination = TGM
Train Date = 1-1-2024
Train Price = 12.00

Train ID = T006
Train Departure Time = 3.20
Train Arrival Time = 3.50
Train Departure From = RAS
Train Destination = SRH
Train Date = 2-2-2024
Train Price = 13.30

Train ID = T007
Train Departure Time = 2.50
Train Arrival Time = 3.20
Train Departure From = TGM
Train Destination = RAS
Train Date = 3-4-2024
Train Price = 19.50

Train ID = T008
Train Departure Time = 1.10
Train Arrival Time = 1.30
Train Departure From = SGB
Train Destination = SRH
Train Date = 4-5-2024
Train Price = 10.50

Train ID = T009
Train Departure Time = 5.50

Train ID = T009
Train Departure Time = 5.50
Train Arrival Time = 6.20
Train Departure From = KKB
Train Destination = KUG
Train Date = 2-8-2024
Train Price = 17.50

Train ID = T010
Train Departure Time = 4.30
Train Arrival Time = 5.00
Train Departure From = KUG
Train Destination = SGB
Train Date = 9-9-2024
Train Price = 17.30

Train ID = T005
Train Departure Time = 13.40
Train Arrival Time = 14.00
Train Departure From = KBB
Train Destination = BTK
Train Date = 26-4-2024
Train Price = 10.50

Press any key to continue . . .

Function 3: Edit Schedule Function

Staff is needed to search for the train ID or destination for editing , once staff search successfully , system will display the details of train record and ask staff for edit confirmation . When staff enter '1' , system will proceed to let staff enter a new data for replacing the existing one

Enter Train ID or Destination To Edit = T002

Train ID = T002
Departure Time = 21.00
Arrival Time = 21.30
Departure From = SGB
Destination = KUG
Train Date = 2-3-2024
Price = 15.50

Are You Sure To Edit This Schedule ?

1.Yes

2.No And Back

Please Enter Your Selection Here = 1

Are You Sure To Edit This Schedule ?

1.Yes

2.No And Back

Please Enter Your Selection Here = 1

Enter New Train ID = T017

Enter New Departure Time =22.00

Enter New Arrival Time = 23.00

Enter New Departure From = SGB

Enter New Destination = KKB

Enter New Date (DD-MM-YYYY) = 2-4-2024

Enter New Price = 16.50

T017 Edited Succesfully...

Function 4: Search Schedule Function

When staff is able to search details with train ID .When search successfully , system will display the details and information for the train ID

```
Search Train ID = T017
```

```
Train ID = T017  
Departure Time = 22.00  
Arrival Time = 23.00  
Departure From = SGB  
Destination = KKB  
Train Date = 2-4-2024  
Price = 16.50  
Press any key to continue . . .
```

Function 5: Delete Schedule Function

If staff want to delete the record , it is needed to search train ID or destination for deleting . When the train ID or destination was found. System will ask for confirmation . If staff enter '1' , system will proceed to delete the details of the record

```
Search Train ID or Train Destination For Delete = T017
```



```
Train ID = T017
Departure Time = 22.00
Arrival Time = 23.00
Departure From = SGB
Destination = KKB
Train Date = 2-4-2024
Price = 16.50
```

```
Are You Sure Delete This Schedule ?
1.Yes
2.No And Back
Please Enter Your Selection Here = 1
```

```
T017 Deleted Succesfully...
```

Function 6: Schedule Report Function

System will generate record for staff to view according to the train destination and the total of train .

```
Generating Schedule Report ...
```

```
Total of Train = 9
```

```
Tanjung Malim = 1
Kuala Kubu Bharu = 1
Rasa = 2
Batang Kali = 1
Serendah = 2
Kuang = 1
Sungai Buloh = 1
```

```
Press any key to continue . . .
```


4.4 Booking Module By Patricia Lee Huay

4.4.1 Brief Description Booking

The booking module has 6 functions that add bookings, search bookings, update bookings, cancel bookings, display all bookings and report of bookings.

- Add Booking
 - This function allows members to add new bookings to the system. Members input relevant details such as member ID, train ID, booking date, passenger name, seat number, coach, payment info with valid member ID.
- Update Booking
 - Members can use this function to update existing bookings. They can modify details such as the train ID, passenger name, seat number, coach, and payment info. After updating, the system and text file will save the changes to the booking record.
- Search Booking
 - This function enables members to search for specific bookings based on criteria such as booking ID, member ID, train ID, booking date, or passenger name when . It will display information of the specific bookings if it is found.
- Display booking
 - Members and Staff can view a list of successful bookings including Booking ID, Member ID , Train ID, booking date, passenger name, seat number, coach, payment info and amount.
- Cancel booking
 - Members can cancel their existing bookings if members wish to cancel or change a mind. The system accepts members' requests to cancel bookings if members enter correct Booking ID
- Report Booking
 - Staff can use the reporting feature to track train occupancy and member booking details. This guarantees the efficient management of Rapidekspres train system services and improves the overall member experience.

4.4.2 Outputs & File Contents

4.4.2 Modules main page

```


                                Rapidekspres Ticket Booking System
=====
|| 1- To ADD booking:          ||
|| 2- To UPDATE reserved tickets: ||
|| 3- To SEARCH ticket:       ||
|| 4- To DISPLAY all booking:  ||
|| 5- To CANCEL the booking:   ||
|| 6- REPORT ticket:          ||
|| 7- MAIN MENU:              ||
=====

Please select your choice(1-7):_
```

Bookings module menu provide user have a selection of bookings

4.4.2 File's existing data

This bookings text file existing data

 bookings - Notepad

File	Edit	Format	View	Help
B001	M103	T004	15:24:30 01/05/24	Patricia Lee# 12D B Credit 16.50
B002	M102	T004	15:24:30 01/05/24	Jaydon Richards# 12C B Credit 16.50
B003	M128	T006	15:25:23 01/05/24	Abby Merrill# 05C E banking 13.30
B004	M174	T005	15:27:26 01/05/24	Liam Vaughan# 05C B DEBIT 10.50
B005	M002	T007	15:27:57 01/05/24	Ashton Montgomery# 10D B debit 19.50
B006	M126	T010	15:28:44 01/05/24	Annika Bernard# 01A D banking 17.30
B007	M124	T003	15:29:58 01/05/24	Kingsley Young# 04C B credit 16.50
B008	M002	T004	15:30:25 01/05/24	Jay Roach# 06D H Banking 12.00
B009	M126	T008	15:31:14 01/05/24	Maximillian Winters# 11B C credit 10.50
B010	M001	T004	15:31:40 01/05/24	Ella Riggs# 07C E credit 12.00
B011	M127	T005	20:06:11 01/05/24	LOH AH BENG# 06C B BANKING 10.50
B012	M002	T008	20:07:53 01/05/24	Adeline Chia# 06D B CREDIT 10.50

Function 1: Add bookings Function

When user choose 1 as want to add booking train ticket from our system

```

                                Rapidekspres Ticket Booking System
                                =====
                                1- To ADD booking:
                                2- To UPDATE reserved tickets:
                                3- To SEARCH ticket:
                                4- To DISPLAY all booking:
                                5- To CANCEL the booking:
                                6- REPORT ticket:
                                7- MAIN MENU:
                                =====

Please select your choice(1-7):1

```

When members want to add booking, this function will display scheduled trains with valid member ID. Upon members entering an invalid or unregistered member ID is can't add booking

When members enter correct the member ID, the booking id and booking date will auto generated by system, then member can input information including name , train id , seat , coach , payment to add bookings

```

C:\Users\user\Downloads\Asg1 (1)\x64\Debug\Asg1.exe
=====ADD BOOKING=====
+-----+
| Train ID | Departure Time | Arrival Time | Departure From | Destination | Date       | Price |
+-----+
| T001     | 13.00          | 14.00        | KKB             | RAS         | 21-03-2024 | 14.50 |
| T002     | 21.00          | 21.30        | SGB             | KUG         | 02-03-2024 | 15.50 |
| T003     | 22.30          | 23.00        | TGM             | KKB         | 21-04-2024 | 16.50 |
| T004     | 1.20           | 2.00         | SGB             | TGM         | 01-01-2024 | 12.00 |
| T006     | 3.20           | 3.50         | RAS             | SRH         | 02-02-2024 | 13.30 |
| T007     | 2.50           | 3.20         | TGM             | RAS         | 03-04-2024 | 19.50 |
| T008     | 1.10           | 1.30         | SGB             | SRH         | 04-05-2024 | 10.50 |
| T009     | 5.50           | 6.20         | KKB             | KUG         | 02-08-2024 | 17.50 |
| T010     | 4.30           | 5.00         | KUG             | SGB         | 09-09-2024 | 17.30 |
| T005     | 13.40          | 14.00        | KBB             | BTK         | 26-04-2024 | 10.50 |
+-----+

+-----+
| Booking ID: B013 |
+-----+
Enter member ID (eg. M001) : M125

Enter Train ID (eg. T001): T006

                                Train ID = T006
                                Departure Time = 3.20
                                Arrival Time = 3.50
                                Departure From = RAS
                                Destination = SRH
                                Train Date = 2-2-2024
                                Price = 13.30
                                -----

Booking Date & Time: 22:31:54 01/05/24
Enter Passenger Name: Joanne Chew
Enter Seat Number for seat (e.g., 12A or 06D): 02C
Enter Coach for seat (A until H): B
Enter Payment Info (CREDIT , DEBIT , BANKING): Credit bank
Amount: 13.30
do you confirm this booking? (y/n) : y
+-----+
Booking added successfully!
+-----+
Do you want to continue adding bookings? (y/n):

```

“Invalid Train ID” will be displayed when user enter wrong train id

```
Enter Train ID (eg. T001): T012
Invalid train id
Enter Train ID (eg. T001): T015
Invalid train id
Enter Train ID (eg. T001): T009
```

```
-----
Train ID = T009
Departure Time = 5.50
Arrival Time = 6.20
Departure From = KKB
Destination = KUG
Train Date = 2-8-2024
Price = 17.50
-----
```

```
Booking Date & Time: 22:34:36 01/05/24
```

Invalid seat number format and invalid coach will be displayed when the user enters the wrong seat and coach.

```
Enter Seat Number for seat (e.g., 12A or 06D): 19C
```

```
=====
Invalid seat number format. Please enter a valid seat number.
First and Second range from 01 until 12, Third character should be 'A', 'B', 'C', or 'D'
=====
```


```
Enter Seat Number for seat (e.g., 12A or 06D): 12D
```

```
Enter Coach for seat (A until H): W
```

```
Invalid coach. Please enter a value from A to H.
```

```
Enter Coach for seat (A until H): A
```

The Booking ID B013 is added and record to the text file

 bookings - Notepad

File Edit Format View Help

```
B001 M103 T004 15:24:30 01/05/24| Patricia Lee# 12D B Credit 16.50
B002 M102 T004 15:24:30 01/05/24| Jaydon Richards# 12C B Credit 16.50
B003 M128 T006 15:25:23 01/05/24| Abby Merrill# 05C E banking 13.30
B004 M174 T005 15:27:26 01/05/24| Liam Vaughan# 05C B DEBIT 10.50
B005 M002 T007 15:27:57 01/05/24| Ashton Montgomery# 10D B debit 19.50
B006 M126 T010 15:28:44 01/05/24| Annika Bernard# 01A D banking 17.30
B007 M124 T003 15:29:58 01/05/24| Kingsley Young# 04C B credit 16.50
B008 M002 T004 15:30:25 01/05/24| Jay Roach# 06D H Banking 12.00
B009 M126 T008 15:31:14 01/05/24| Maximillian Winters# 11B C credit 10.50
B010 M001 T004 15:31:40 01/05/24| Ella Riggs# 07C E credit 12.00
B011 M127 T005 20:06:11 01/05/24| LOH AH BENG# 06C B BANKING 10.50
B012 M002 T008 20:07:53 01/05/24| Adeline Chia# 06D B CREDIT 10.50
B013 M125 T006 22:31:54 01/05/24| Joanne Chew# 02C B Credit 13.30
```

Function 2: Update bookings Function

This function is able to modify existing records in this system if members have a mistake or change a mind in bookings. This function also able user to choose which information to update.

```
=====UPDATE BOOKING=====
Enter BOOKING ID To UPDATE (Exp:B001) : B013
| Booking ID : B013 |
-----
UPDATE BOOKING
-----
1. TRAIN ID      : T006
2. PASSENGER NAME: Joanne Chew
3. SEAT NUMBER  : 02C
4. COACH        : B
5. PAYMENT INFO  : Credit
-----
Please choose the number to update: 1
-----
| Train ID | Departure Time | Arrival Time | Departure From | Destination | Date       | Price |
|-----|-----|-----|-----|-----|-----|-----|
| T001 | 13.00 | 14.00 | KKB | RAS | 21-03-2024 | 14.50 |
| T002 | 21.00 | 21.30 | SGB | KUG | 02-03-2024 | 15.50 |
| T003 | 22.30 | 23.00 | TGM | KKB | 21-04-2024 | 16.50 |
| T004 | 1.20 | 2.00 | SGB | TGM | 01-01-2024 | 12.00 |
| T006 | 3.20 | 3.50 | RAS | SRH | 02-02-2024 | 13.30 |
| T007 | 2.50 | 3.20 | TGM | RAS | 03-04-2024 | 19.50 |
| T008 | 1.10 | 1.30 | SGB | SRH | 04-05-2024 | 10.50 |
| T009 | 5.50 | 6.20 | KKB | KUG | 02-08-2024 | 17.50 |
| T010 | 4.30 | 5.00 | KUG | SGB | 09-09-2024 | 17.30 |
| T005 | 13.40 | 14.00 | KKB | BTK | 26-04-2024 | 10.50 |
|-----|-----|-----|-----|-----|-----|
Enter Train ID (eg. T001): T003
-----
Train ID = T003
Departure Time = 22.30
Arrival Time = 23.00
Departure From = TGM
Destination = KKB
Train Date = 21-4-2024
Price = 16.50
-----
Booking updated successfully!
-----
Do you still want continue UPDATE booking anymore ? (y/n):
```

So, now we have saw the train id has been change from T006 to T003 in booking B013



bookings - Notepad

File Edit Format View Help

```
B001 M103 T004 15:24:30 01/05/24| Patricia Lee# 12D B Credit 16.50
B002 M102 T004 15:24:30 01/05/24| Jaydon Richards# 12C B Credit 16.50
B003 M128 T006 15:25:23 01/05/24| Abby Merrill# 05C E banking 13.30
B004 M174 T005 15:27:26 01/05/24| Liam Vaughan# 05C B DEBIT 10.50
B005 M002 T007 15:27:57 01/05/24| Ashton Montgomery# 10D B debit 19.50
B006 M126 T010 15:28:44 01/05/24| Annika Bernard# 01A D banking 17.30
B007 M124 T003 15:29:58 01/05/24| Kingsley Young# 04C B credit 16.50
B008 M002 T004 15:30:25 01/05/24| Jay Roach# 06D H Banking 12.00
B009 M126 T008 15:31:14 01/05/24| Maximillian Winters# 11B C credit 10.50
B010 M001 T004 15:31:40 01/05/24| Ella Riggs# 07C E credit 12.00
B011 M127 T005 20:06:11 01/05/24| LOH AH BENG# 06C B BANKING 10.50
B012 M002 T008 20:07:53 01/05/24| Adeline Chia# 06D B CREDIT 10.50
B013 M125 T003 22:31:54 01/05/24| Joanne Chew# 02C B Credit 13.30
```

Function 3: Search bookings Function

The search bookings function allows users to search for all details of bookings.

```
=====SEARCH BOOKING=====
Enter BOOKING ID To SEARCH (Exp:B001) : B013

      | Booking ID : B013 |
      -----
      MEMBER ID       : M125
      TRAIN ID        : T003
      BOOKING DATE     : 22:31:54 01/05/24
      PASSENGER NAME   : Joanne Chew
      SEAT NUMBER      : 02C
      COACH            : B
      PAYMENT INFO     : Credit
      AMOUNT           : 13.30
      -----

Do you want to continue to search? (Y=Yes , N=N0) :
```

When member entered wrong booking id , the function will display “booking id not found”

```
=====SEARCH BOOKING=====
Enter BOOKING ID To SEARCH (Exp:B001) : B015

      -----
      BOOKING ID NOT FOUND !
      -----

Press any key to continue . . .
```


Function 4: Display bookings Function

This display function displays a list of successful bookings.

ALL BOOKING TICKET DETAILS									
BOOKING ID	TRAIN ID	MEMBER ID	BOOKING DATE	PASSENGER NAME	SEAT NUMBER	COACH	PAYMENT INFO	AMOUNT	
B001	T004	M103	15:24:30 01/05/24	Patricia Lee	12D	B	Credit	16.50	
B002	T004	M102	15:24:30 01/05/24	Jaydon Richards	12C	B	Credit	16.50	
B003	T006	M128	15:25:23 01/05/24	Abby Merrill	05C	E	banking	13.30	
B004	T005	M174	15:27:26 01/05/24	Liam Vaughan	05C	B	DEBIT	10.50	
B005	T007	M002	15:27:57 01/05/24	Ashton Montgomery	10D	B	debit	19.50	
B006	T010	M126	15:28:44 01/05/24	Annika Bernard	01A	D	banking	17.30	
B007	T003	M124	15:29:58 01/05/24	Kingsley Young	04C	B	credit	16.50	
B008	T004	M002	15:30:25 01/05/24	Jay Roach	06D	H	Banking	12.00	
B009	T008	M126	15:31:14 01/05/24	Maximillian Winters	11B	C	credit	10.50	
B010	T004	M001	15:31:40 01/05/24	Ella Riggs	07C	E	credit	12.00	
B011	T005	M127	20:06:11 01/05/24	LOH AH BENG	06C	B	BANKING	10.50	
B012	T008	M002	20:07:53 01/05/24	Adeline Chia	06D	B	CREDIT	10.50	
B013	T003	M125	22:31:54 01/05/24	Joanne Chew	02C	B	Credit	13.30	

13 record(s) booking.

Press any key to continue . . .

Function 5: Cancel bookings Function

The cancel bookings function allows users to cancel existing bookings when they wish to cancel.

```
=====DELETE BOOKING=====

Enter BOOKING ID To Delete (Exp:B001) : B006

      | Booking ID : B006 |
      |-----|
      |
      | MEMBER ID      : M126
      | TRAIN ID      : T010
      | BOOKING DATE   : 15:28:44 01/05/24
      | PASSENGER NAME : Annika Bernard
      | SEAT NUMBER    : 01A
      | COACH          : D
      | PAYMENT INFO   : banking
      | AMOUNT         : 17.30
      |
      |-----|
Do You Confirm To Delete ? ( Y=Yes/N=No ) : Y

      |-----|
      | BOOKING ID B006 deleted SUCESSFULLY !
      |-----|

Press any key to continue . . .
```

After members successfully cancel their booking , the record of booking will delete that they cancel. We can saw the B006 in text file is was deleted



bookings - Notepad

File Edit Format View Help

```
B001 M103 T004 15:24:30 01/05/24| Patricia Lee# 12D B Credit 16.50
B002 M102 T004 15:24:30 01/05/24| Jaydon Richards# 12C B Credit 16.50
B003 M128 T006 15:25:23 01/05/24| Abby Merrill# 05C E banking 13.30
B004 M174 T005 15:27:26 01/05/24| Liam Vaughan# 05C B DEBIT 10.50
B005 M002 T007 15:27:57 01/05/24| Ashton Montgomery# 10D B debit 19.50
B007 M124 T003 15:29:58 01/05/24| Kingsley Young# 04C B credit 16.50
B008 M002 T004 15:30:25 01/05/24| Jay Roach# 06D H Banking 12.00
B009 M126 T008 15:31:14 01/05/24| Maximillian Winters# 11B C credit 10.50
B010 M001 T004 15:31:40 01/05/24| Ella Riggs# 07C E credit 12.00
B011 M127 T005 20:06:11 01/05/24| LOH AH BENG# 06C B BANKING 10.50
B012 M002 T008 20:07:53 01/05/24| Adeline Chia# 06D B CREDIT 10.50
B013 M125 T006 22:31:54 01/05/24| Joanne Chew# 02C B Credit 13.30
```

Function 6: Report bookings Function

This function can help *RapidEkspres* have a summary view of booking in this system that can help find trends and potential loyalty customers. Overall, this is able to enhance supporting informed decision-making and administrative tasks.

```
=====
                        REPORT OF TOTAL BOOKING OF TICKET
=====
B001      Patricia Lee      RM16.50
B002      Jaydon Richards   RM16.50
B003      Abby Merrill      RM13.30
B004      Liam Vaughan      RM10.50
B005      Ashton Montgomery RM19.50
B007      Kingsley Young    RM16.50
B008      Jay Roach         RM12.00
B009      Maximillian Winters RM10.50
B010      Ella Riggs        RM12.00
B011      LOH AH BENG       RM10.50
B012      Adeline Chia      RM10.50
B013      Joanne Chew       RM13.30
=====
12 record(s) booking.
=====
Total amount of all tickets:      RM161.60
=====

=====
Train ID | Bookings
=====
T004     | 4
T006     | 1
T005     | 2
T007     | 1
T003     | 2
T008     | 2
=====
Member ID | Bookings
=====
M103     | 1
M102     | 1
M128     | 1
M174     | 1
M002     | 3
M124     | 1
M126     | 1
M001     | 1
M127     | 1
M125     | 1
=====

=====
Hottest Booking Train ID : T004
The Most Booking By member : M002
=====

Press any key to continue . . . ■
```