

PIM - User Manual

Project Name: Personal Information Manager

Group Number: 13

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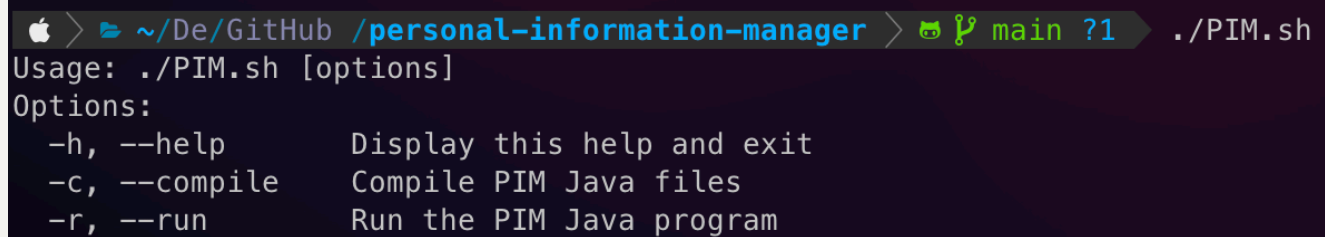
1 Introduction

Personal information manager (PIM) is a system which allows users to manage their personal information conveniently. First, users should sign up and log in an account to manage their personal information. All the personal information of a user can be recorded as four types of personal information records (PIRs) which are contacts, notes, tasks and events. In addition to creating new PIRs, the system can also support other four functions about PIRs, including printing out detailed information about PIRs, modifying PIRs, deleting PIRs, searching for PIRs based on keywords, time, multiple keywords and/or time with logical connectors. For all functions about PIRs, there is a restriction that the option input by the user can only operate one PIR but cannot operate several more PIRs simultaneously. For removing PIRs, there is a restriction that there is no option for users to delete all PIRs.

2 PIM Starting

2.1 PIM Program Help Command

```
./PIM.sh -h
## OR
./PIM.sh --help
## OR
./PIM.sh
```

A terminal window screenshot showing the execution of the help command. The prompt is an Apple logo followed by a greater-than sign. The path is ~/De/GitHub /personal-information-manager. The current directory is main. The command being executed is ./PIM.sh. The output shows the usage and options for the script.

```
Apple > ~/De/GitHub /personal-information-manager > main ?1 > ./PIM.sh
Usage: ./PIM.sh [options]
Options:
-h, --help      Display this help and exit
-c, --compile   Compile PIM Java files
-r, --run       Run the PIM Java program
```

2.2 PIM Program Compile Command

```
./PIM.sh -c
## OR
./PIM.sh --compile
## OR
./PIM.sh
```

2.3 PIM Program Running Command

```
./PIM.sh -r
## OR
./PIM.sh --run
```

3 PIM Program Usage

3.1 Initialization Interface

```
-----  
Welcome to the Personal Information Manager (PIM)!  
COMP3211 - Software Engineering  
Project Group 13  
  
- [1] Login  
- [2] Signup  
- [-1] Exit System  
  
>>> Please select the above options x in [x]:
```

3.2 User Signup

```
-----  
Signup  
  
Username: david  
Password: 1111  
-----
```

- Input: Username, Password
- Output: Let the user to input the informations (Guide)

3.3 User Login

```
-----  
Login  
  
Username: david  
Password: 1111  
Login Success!  
-----
```

- Input: Username, Password
- Output: Let the user to input the informations (Guide)

3.4 Main Menu Interface

```
-----  
Welcome david  
-----  
  
- [1] Notes  
- [2] Contacts  
- [3] To-do Lists  
- [4] Events  
- [5] Load .PIM File  
- [6] Export .PIM File  
- [-1] Exit System  
  
>>> Please select the above options x in [x]: |
```

- Input: Select Number
- Output: Main Menu View

3.5 Note View Interface

```
-----  
Notes - david  
  
- [1] New Notes  
- [2] Read Note  
- [3] Search Note  
- [4] Modify Note  
- [5] Remove Note  
- [-1] Back to last page  
  
>>> Please select the above options x in [x]: |
```

- Input: Select Number
- Output: Note Menu View

3.5.1 Create Note Interface

```
>>> Please select the above options x in [x]: 1  
Note Title: Note 1  
Note Content:  
-----  
Here is Note 1 and Hello World!  
-----  
  
- [1] Save Note  
- [2] Discard Note  
>>> Please select the above options x in [x]: 1
```

- Input: Note Title, Note Content, Select Number
- Output: Let the user to input the informations (Guide)

3.5.2 Read Notes Interface

```
>>> Please select the above options x in [x]: 2
-----

- [1] Choose which one to read
- [2] Read All
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Notes:
Note ID      Note Title
1            Note 1
>>> Please input the class ID you want to read: 1
Note Title: Note 1
Note Content:
-----
This is my first note
-----
Note last modify time: 2023-11-22 21:36:25
-----

- [1] Choose which one to read
- [2] Read All
- [-1] Back to last page
>>> Please select the above options x in [x]: 2
Note Title: Note 1
Note Content:
-----
This is my first note
-----
Note last modify time: 2023-11-22 21:36:25
-----

- [1] Choose which one to read
- [2] Read All
- [-1] Back to last page
>>> Please select the above options x in [x]: -1
```

- Input: Note ID, Select Number
- Output: User selected Note ID will be printout all the notes, and if select all, all the notes will be printout

3.5.3 Search Note Interface

3.5.3.1 Search by Keyword

```
-----  
                                Search  
- [1] Search by Keyword  
- [2] Search by Time  
- [3] Search with Logic Connector  
>>> Please select the above options x in [x]: 1  
-----  
                                Search  
Searching Keyword(s): note  
Search Result:  
-----  
Note 1 This is my first note 2023-11-22 21:36:25  
-----
```

3.5.3.2 Search by Time

```
>>> Please select the above options x in [x]: 3  
-----  
                                Search  
- [1] Search by Keyword  
- [2] Search by Date  
- [3] Search with Logic Connector  
>>> Please select the above options x in [x]: 2  
-----  
                                Search  
Searching by Date: = 2023-11-19  
Search Result:  
-----  
Note 1 Here is Note 1 and Hello World! 2023-11-19  
Note 2 My Name is David Jiang and here is the testing note. 2023-11-19  
-----
```

3.5.3.3 Search by Logic Connector

```
>>> Please select the above options x in [x]: 3
-----
                                Search
- [1] Search by Keyword
- [2] Search by Date
- [3] Search with Logic Connector
>>> Please select the above options x in [x]: 3
-----
                                Search
Searching with logic connector(s): hello && > 2023-11-18
Search Result:
-----
Note 1 Here is Note 1 and Hello World! 2023-11-19
-----
```

- Input: Searching Keyword(s) or Time or Keywords with logical Connector
- Output: The results of the searching

3.5.4 Modify Note Interface


```

>>> Please select the above options x in [x]: 4
-----

- [1] Choose which one to update
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Notes:
Note ID      Note Title
1            Note 1
2            Note 2
>>> Please input the ID you want to update: 1
Note Title: Note 1
Note Content:
-----

Here is Note 1 and Hello World!
-----

Note last modify time: 2023-11-19
Note Title: Hello
Note Content:
-----

Hello world and here is PolyU
Update Successfully!

```

- Input: Note ID, Note Title, Note Content
- Output: The If the update successful, will printout 'Update Successfully!'

3.5.5 Remove Note Interface

```
>>> Please select the above options x in [x]: 5
```

```
-----  
Remove
```

```
- [1] Choose which one to remove
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: 1
```

```
-----  
Your List of Notes:
```

Note ID	Note Title
---------	------------

2	Note 2
---	--------

1	Hello
---	-------

```
-----  
Remove
```

```
- [1] Choose which one to remove
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: 2
```

```
Data removed successfully!
```

```
Remove Successfully!
```

```
-----  
Remove
```

```
- [1] Choose which one to remove
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: -1
```

- Input: Note ID, Select Number
- Output: If the remove successful, the 'Remove Successfully!'

3.6 Contact View Interface

```
-----  
                Contacts - david  
  
- [1] Create New Contact  
- [2] All Contacts  
- [3] Search Contact  
- [4] Modify Contact  
- [5] Remove Contact  
- [-1] Back to last page  
  
>>> Please select the above options x in [x]: |
```

- Input: Select Number
- Output: Contact Menu View

3.6.1 Create Contact Interface

```
>>> Please select the above options x in [x]: 1  
First Name: Mike  
Last Name: He  
Phone Number: 52341523  
Address: 123 Main Street  
-----  
  
- [1] Save Contact  
- [2] Discard Contact  
>>> Please select the above options x in [x]: 1
```

- Input: First Name, Last Name, Phone Number, Address, Select Number
- Output: Let the user to input the informations (Guide)

3.6.2 All Contacts Interface

```
>>> Please select the above options x in [x]: 2
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Contacts:
Contact ID      Contact Name
1               He Mike
2               Liu Tom
>>> Please input the class ID you want to look for: 1
First Name: Mike
Last Name: He
Phone Number: 52341523
Address: 123 Main Street
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 2
First Name: Mike
Last Name: He
Phone Number: 52341523
Address: 123 Main Street
First Name: Tom
Last Name: Liu
Phone Number: 95251341
Address: 456 Sub Street
-----
```

- Input: Contact ID, Select Number
- Output: User selected Contact ID will be printout all the contacts, and if select all, all the contacts will be printout

3.6.3 Search Note Interface

3.6.3.1 Search by Keyword

```
>>> Please select the above options x in [x]: 3
```

```
-----
```

```
Search
```

- [1] Search by Keyword
- [2] Search with Logic Connector

```
>>> Please select the above options x in [x]: 1
```

```
-----
```

```
Search
```

```
Searching Keyword(s): tom
```

```
Search Result:
```

```
-----
```

```
Tom Liu 95251341 456 Sub Street
```

```
-----
```

3.6.3.2 Search by Logic Connector

```
>>> Please select the above options x in [x]: 3
```

```
-----  
                                Search
```

- [1] Search by Keyword
- [2] Search with Logic Connector

```
>>> Please select the above options x in [x]: 2
```

```
-----  
                                Search
```

```
Searching with logic connector(s): mike || sub street
```

```
Search Result:
```

```
-----  
Mike He 52341523 123 Main Street
```

```
Tom Liu 95251341 456 Sub Street  
-----
```

- Input: Searching Keyword(s) or Date or Keywords with logical Connector
- Output: The results of the searching

3.6.4 Modify Contact Interface

```
>>> Please select the above options x in [x]: 4
```

```
-----
```

```
- [1] Choose which one to update
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: 1
```

```
-----
```

```
Your List of Contacts:
```

```
Contact ID      Contact Name
```

```
1               Mike He
```

```
2               Tom Liu
```

```
>>> Please input the ID you want to update: 2
```

```
First Name: Tom
```

```
Last Name: Liu
```

```
Phone Number: 95251341
```

```
Address: 456 Sub Street
```

```
First Name: Tom
```

```
Last Name: Liu
```

```
Phone Number: 95251341
```

```
Address: 978 First Street
```

```
Update Successfully!
```

```
-----
```

- Input: Contact ID, First Name, Last Name, Phone Number, Address, Select Number
- Output: The If the update successful, will printout 'Update Successfully!'

3.6.5 Remove Contact Interface

```
>>> Please select the above options x in [x]: 5
```

```
-----  
Remove
```

```
- [1 or ID] Choose which one to remove
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: 1
```

```
-----  
Your List of Contacts:
```

Contact ID	Contact Name
------------	--------------

1	Mike
---	------

2	Tom
---	-----

```
-----  
Remove
```

```
- [1 or ID] Choose which one to remove
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: 2
```

```
Data removed successfully!
```

```
Remove Successfully!
```

- Input: Contact ID, Select Number
- Output: If the remove successful, the 'Remove Successfully!'

3.7 To-do View Interface

To-do Lists - david

- [1] Create New Task
- [2] All Tasks
- [3] Search Task
- [4] Modify Task
- [5] Remove Task
- [-1] Back to last page

>>> Please select the above options x in [x]:

- Input: Select Number
- To-do Task Menu View

3.7.1 Create Task Interface

```
>>> Please select the above options x in [x]: 1
Task Name: Task 2
Task Deadline (YYYY-MM-DD HH:MM:SS): 2023-12-03 11:30:00
Task Description: Finish task 2
```

-
- [1] Save Task
 - [2] Discard Task

```
>>> Please select the above options x in [x]: 1
```

- Input: Task Name, Task Deadline, Task Description, Select Number
- Output: Let the user to input the informations (Guide)

3.7.2 All Tasks Interface

```
>>> Please select the above options x in [x]: 2
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Tasks:
Task ID      Task Title
1            Task 1
>>> Please input the class ID you want to look for: 1
Task Name: Task 1
Task Description: Finish task 1
Task Deadline (YYYY-MM-DD HH:MM:SS): 2023-11-30 12:00:00
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 2
Task Name: Task 1
Task Description: Finish task 1
Task Deadline (YYYY-MM-DD HH:MM:SS): 2023-11-30 12:00:00
-----
```

- Input: Task ID, Select Number
- Output: User selected Task ID will be printout all the tasks, and if select all, all the tasks will be printout

3.7.3 Search Task Interface

3.7.3.1 Search by Keyword

```
>>> Please select the above options x in [x]: 3
```

```
-----  
                                Search  
- [1] Search by Keyword  
- [2] Search by Time  
- [3] Search with Logic Connector
```

```
>>> Please select the above options x in [x]: 1
```

```
-----  
                                Search  
Searching Keyword(s): task 2  
Search Result:
```

```
-----  
Task 2 Finish task 2 2023-12-03 11:30:00  
-----
```

3.7.3.2 Search by Time

```
>>> Please select the above options x in [x]: 3
```

```
-----  
                                Search  
- [1] Search by Keyword  
- [2] Search by Time  
- [3] Search with Logic Connector
```

```
>>> Please select the above options x in [x]: 2
```

```
-----  
                                Search  
Searching by Time: = 2023-11-30 12:00:00  
Search Result:
```

```
-----  
Task 1 Finish task 1 2023-11-30 12:00:00  
-----
```

3.7.3.3 Search by Logic Connector

```

>>> Please select the above options x in [x]: 3
-----
                        Search
- [1] Search by Keyword
- [2] Search by Time
- [3] Search with Logic Connector
>>> Please select the above options x in [x]: 3
-----
                        Search
Searching with logic connector(s): task && > 2023-11-30 12:00:00
Performing keyword search.
Search Result:
-----
Task 2 Finish task 2 2023-12-03 11:30:00
-----

```

- Input: Searching Keyword(s) or Time or Keywords with logical Connector
- Output: The results of the searching

3.7.4 Modify Task Interface

```

>>> Please select the above options x in [x]: 4
-----

- [1] Choose which one to update
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----
Your List of Tasks:
Task ID      Task Title
1            Task 1
2            Task 2
>>> Please input the ID you want to update: 1
Task Name: Task 1
Task Description: Finish task 1
Task Deadline (YYYY-MM-DD HH:MM:SS): 2023-11-30 12:00:00
Task Name: Task 1
Task Description: Did the task 1 and make sure the answer is correct
Task Deadline (YYYY-MM-DD HH:MM:SS): 2023-11-30 12:00:00
Update Successfully!
-----

```

- Input: Task ID, First Name, Last Name, Phone Number, Address, Select Number
- Output: The If the update successful, will printout 'Update Successfully!'

3.7.5 Remove Task Interface

```
>>> Please select the above options x in [x]: 5
-----
                                Remove

- [1 or ID] Choose which one to remove
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----
Your List of Tasks:
Task ID      Task Title
2            Task 2
1            Task 1
-----
                                Remove

- [1 or ID] Choose which one to remove
- [-1] Back to last page
>>> Please select the above options x in [x]: 2
Data removed successfully!
Remove Successfully!
-----
```

- Input: Task ID, Select Number
- Output: If the remove successful, the 'Remove Successfully!'

3.8 Event View Interface

```
-----  
Events - david  
  
- [1] Create New Event  
- [2] All Events  
- [3] Search Event  
- [4] Modify Event  
- [5] Remove Event  
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]: |
```

- Input: Select Number
- Output: Events Menu View

3.8.1 Create Event Interface

```
>>> Please select the above options x in [x]: 1  
Event Name: Event 2  
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-11-25 18:00:00  
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-11-25 15:30:00  
Event Description:
```

```
-----  
Join event 2 --- party  
-----
```

```
- [1] Save Event  
- [2] Discard Event
```

```
>>> Please select the above options x in [x]: 1  
-----
```

- Input: Event Name, Event Start Time, Event Alarm, Event Description, Select Number
- Output: Let the user to input the informations (Guide)

3.8.2 All Events Interface

```
>>> Please select the above options x in [x]: 2
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Events:
Event ID      Event Title
2             Event 2
1             Event 1
>>> Please input the class ID you want to look for: 1
Event Name: Event 1
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-12-02 11:30:00
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-12-01 23:59:00
Event Description:
-----

Join event 1
-----

- [1] Choose which one to look for
- [2] Look For All
- [-1] Back to last page
>>> Please select the above options x in [x]: 2
Event Name: Event 2
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-11-25 18:00:00
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-11-25 15:30:00
Event Description:
-----

Join event 2 --- party
Event Name: Event 1
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-12-02 11:30:00
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-12-01 23:59:00
Event Description:
-----

Join event 1
-----
```

- Input: Event ID, Select Number

- Output: User selected Event ID will be printout all the events, and if select all, all the events will be printout

3.8.3 Search Event Interface

3.8.3.1 Search by Keyword

```
>>> Please select the above options x in [x]: 3
-----
                        Search
- [1] Search by Keyword
- [2] Search by Time
- [3] Search with Logic Connector
>>> Please select the above options x in [x]: 1
-----
                        Search
Searching Keyword(s): party
Search Result:
-----
Event 2 Join event 2 --- party 2023-11-25 18:00:00 2023-11-25 15:30:00
-----
```

3.8.3.2 Search by Time

```
>>> Please select the above options x in [x]: 3
-----
                        Search
- [1] Search by Keyword
- [2] Search by Time
- [3] Search with Logic Connector
>>> Please select the above options x in [x]: 2
-----
                        Search
Searching by Time: < 2023-11-30 11:00:00
Search Result:
-----
Event 2 Join event 2 --- party 2023-11-25 18:00:00 2023-11-25 15:30:00
-----
```


3.8.3.3 Search by Logic Connector

```
>>> Please select the above options x in [x]: 3
-----
                                Search
- [1] Search by Keyword
- [2] Search by Time
- [3] Search with Logic Connector
>>> Please select the above options x in [x]: 3
-----
                                Search
Searching with logic connector(s): event && > 2023-11-30 12:00:00
Performing keyword search.
Search Result:
-----
Event 1 Join event 1 2023-12-02 11:30:00 2023-12-01 23:59:00
-----
```

- Input: Searching Keyword(s) or Time or Keywords with logical Connector
- Output: The results of the searching

3.8.4 Modify Event Interface

```

>>> Please select the above options x in [x]: 4
-----

- [1] Choose which one to update
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----

Your List of Events:
Event ID      Event Title
2             Event 2
1             Event 1
>>> Please input the ID you want to update: 1
Event Name: Event 1
Event Description:
-----

Join event 1
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-12-02 11:30:00
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-12-01 23:59:00
Event Name: Event 1
Event Description:
-----

Join event 1 - concert
Event Start Time (YYYY-MM-DD HH:MM:SS): 2023-12-02 11:30:00
Event Alarm (YYYY-MM-DD HH:MM:SS): 2023-12-01 23:59:00
Update Successfully!
-----

```

- Input: Event ID, Event Name, Event Start Time, Event Alarm, Event Description, Select Number
- Output: The If the update successful, will printout 'Update Successfully!'

3.8.5 Remove Event Interface

```
>>> Please select the above options x in [x]: 5
```

```
-----  
Remove
```

- [1 or ID] Choose which one to remove
- [-1] Back to last page

```
>>> Please select the above options x in [x]: 1
```

```
-----  
Your List of Events:
```

Event ID	Event Title
1	Event 1
3	Event 3
2	Event 2

```
-----  
Remove
```

- [1 or ID] Choose which one to remove
- [-1] Back to last page

```
>>> Please select the above options x in [x]: 3
```

```
Data removed successfully!
```

```
Remove Successfully!  
-----
```

- Input: Event ID, Select Number
- Output: If the update successful, the 'Update Successfully!'

3.9 Import PIM file Interface

```

>>> Please select the above options x in [x]: 5
-----
                                Import

The file(s) in Input folder:
Files in input folder:
david_export.pim
-----
- [1] Choose the PIM File
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
-----
>>> Please input the file name: david_export.pim
Import successfully!

```

- Input: Select Number
- Output: If successful, will printout 'import Successfully!'

3.10 Export PIM file Interface

```

>>> Please select the above options x in [x]: 6
-----
                                Export

- [1] Confirm export to .PIM File
- [-1] Back to last page
>>> Please select the above options x in [x]: 1
Contacts
1 | 1 | Tommy | Duan | 89153852 | 456 Sub Street |
2 | 1 | Tom | Chen | 42315612 | 092 Year Street |
Notes
Events
2 | 1 | Event 2 | Join event 2 --- party | 2023-11-25 18:00:00 | 2023-11-25 15:30:00 |
1 | 1 | Event 1 | 2023-12-01 23:59:00 | Join event 1 - concert | 2023-12-02 11:30:00 |
Tasks
2 | 1 | Task 2 | Finish task 2 | 2023-12-03 11:30:00 |
1 | 1 | Task 1 | 2023-11-30 12:00:00 | Did the task 1 and make sure the answer is correct |
Export Successfully!

```

Export File Sample:

```
Contacts
1,1,Tommy,Duan,89153852,456 Sub Street
2,1,Tom,Chen,42315612,092 Year Street
End of Contacts
Notes
End of Notes
Events
2,1,Event 2,Join event 2 --- party,2023-11-25 18:00:00,2023-11-25 15:30:00
1,1,Event 1,2023-12-01 23:59:00,Join event 1 - concert,2023-12-02 11:30:00
End of Events
Tasks
2,1,Task 2,Finish task 2,2023-12-03 11:30:00
1,1,Task 1,2023-11-30 12:00:00,Did the task 1 and make sure the answer is correct
End of Tasks
```

- Input: Select Number
- Output: If successful, will printout 'Export Successfully!'

4 Error Handling

4.1 Selection Input Error Handle

```
-----  
Notes - david  
  
- [1] New Notes  
- [2] Read Note  
- [3] Search Note  
- [4] Modify Note  
- [5] Remove Note  
- [-1] Back to last page  
  
>>> Please select the above options x in [x]: 8  
Please input the correct number!  
-----  
Notes - david  
  
- [1] New Notes  
- [2] Read Note  
- [3] Search Note  
- [4] Modify Note  
- [5] Remove Note  
- [-1] Back to last page  
  
>>> Please select the above options x in [x]:
```

- Give the error message, and try again.

4.2 Login Error Handle

Login

Username: *david*

Password: *1234*

An error occurred while verifying the account:

Please try again or contact support.

Login Failed!

- Give the error message and the program will close, so run the program again.

4.3 Input Date Error Handle

```
>>> Please select the above options x in [x]: 1
```

```
Task Name: task 1
```

```
Task Deadline (YYYY-MM-DD): 2023-09
```

```
Task Description: This is task 1
```

```
-----
```

```
- [1] Save Task
```

```
- [2] Discard Task
```

```
>>> Please select the above options x in [x]: 1
```

```
Please input the correct date format!
```

```
-----
```

```
        To-do Lists - david
```

```
- [1] Create New Task
```

```
- [2] All Tasks
```

```
- [3] Search Task
```

```
- [4] Modify Task
```

```
- [5] Remove Task
```

```
- [-1] Back to last page
```

```
>>> Please select the above options x in [x]:
```

- Give the error message, and rewrite again.

4.4 Searching no result Handle


```
>>> Please select the above options x in [x]: 3
```

```
-----  
                                Search
```

- [1] Search by Keyword
- [2] Search by Date
- [3] Search with Logic Connector

```
>>> Please select the above options x in [x]: 1
```

```
-----  
                                Search
```

```
Searching Keyword(s): hello
```

```
Search Result:  
-----  
-----
```

- When searching and no result, will be return the empty.