CSIT121 Lab Exercises

Lab 2

Objectives

- Get familiar with OOD and UML.
- Get familiar with the test-drive software development mode.

Exercise 1

Build a simple command-line notebook application. The application will display a menu, and users can select menu items to create, search, modify notes, or quit the application. Each note contains a unique ID, a tag, and a short memo. Besides these essential functions, you may also consider some extra functions for your notebook, such as sorting the notes based on ID or date.

Step 1: analyse the above requirement and consider possible class and class members.

Step 2: represent your class design with a UML class diagram.

Step 3: implement your notebook application with Python and test your application.

An example of the application execution results is given below. Your application may look different from the example.

```
Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit

Enter an option: 3
Enter a memo: Hello World
Enter tages: tag1
Your note has been added.

Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit

Enter an option: 1
1: tag1
Hello World

Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit
```

```
Enter an option: 2
Search for: tag1
tag1
1: tag1
Hello World

Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit

Enter an option: 4
Enter a note id: 1
Enter a memo: Hello Objects World
Enter tags: tag2

Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit

Enter an option: 1
1: tag2
Hello Objects World

Notebook Menu

1. Show all Notes
2. Search Notes
3. Add Note
4. Modify Note
5. Quit

Enter an option: 5
Thank you for using your notebook today.
```