CPE009B

LOST AND FOUND MANAGEMENT SYSTEM: PYTHON IMPLEMENTATION USING GUI

GROUP 6

1. **Objective(s)**

General Objective:

- The program should have a Graphical User Interface (GUI)
- The program should utilize OOP Concepts (Class, Object, Polymorphism, Inheritance, Encapsulation)
- The program must be related to Computer Engineering
- The program will be done using the Python programming language

2. Intended Learning Outcomes (ILOS)

- Develop and design a graphical user interface in Python for a Lost and Found Management System.
- Develop a comprehensive and user-friendly Lost and Found Management System.
- Implement a system that categorizes items based on their status and allows efficient tracking, management, and retrieval of lost items.

3. Discussion

I. Background of the study

In schools like the Technological Institute of the Philippines Quezon City, students often lose belongings such as books, money, and sports gear due to their busy schedules. The Lost and Found application addresses this by digitizing the traditional process, offering features like item tracking, user-friendly navigation, and a log-in system to streamline item retrieval and improve efficiency.

3. Discussion

II. Significance of the Study

This study aims to replace traditional logbooks with a digital lost and found system, developed using Python, to enhance efficiency on campus.

- For Students: It reduces the hassle of reporting and locating lost items, offering a convenient solution for managing frequently misplaced belongings.

3. Discussion

III. Scope and Limitation

Scope

- User Registration and Login System: Allows users to create and access personal accounts.
- User-Friendly Interface: Provides an intuitive and accessible design for easy navigation.
- Search Functionalities: Enables users to search for reported lost or claimed items effectively.
- Data Management: Stores user data, lost item reports, found item reports, and user account information in text files for simplicity.

Limitation

- The study will not develop a mobile application or web-based version, limiting accessibility to the desktop program.
- It does not address advanced user roles or complex permission levels beyond basic user functionalities.
- The system relies on text file storage, and advanced database management systems will be considered for future iterations.
- The study does not evaluate the financial feasibility or operational costs of implementing the system.

4. Material and Equipment

- Personal Laptop
- Anaconda Python
- PyQt5
- Python IDEs (Spyder, Jupyter and/or Pycharm)

5. Procedure

Flow Chart

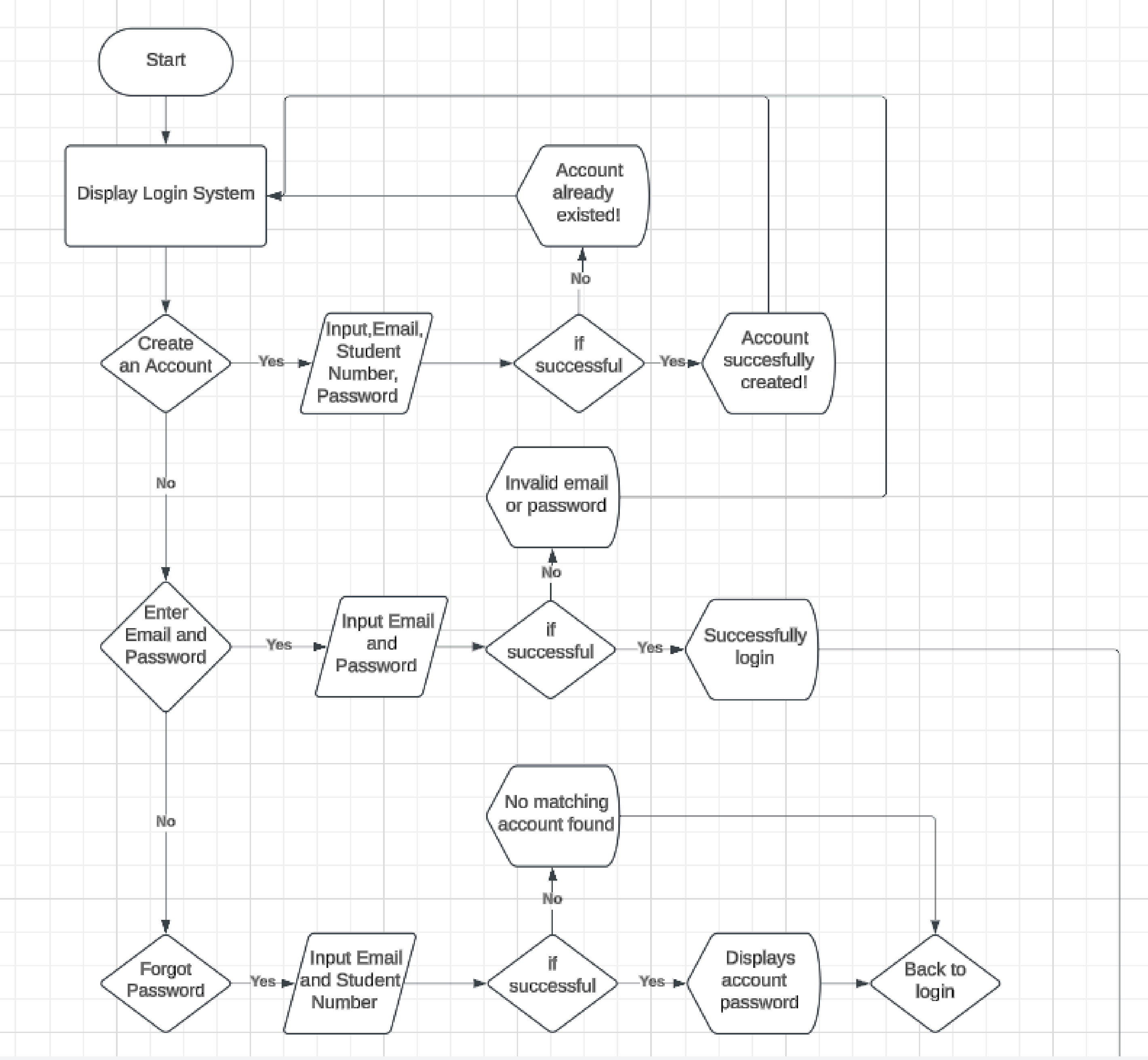


Figure 5.1: Flowchart of the Program: Login Windiow

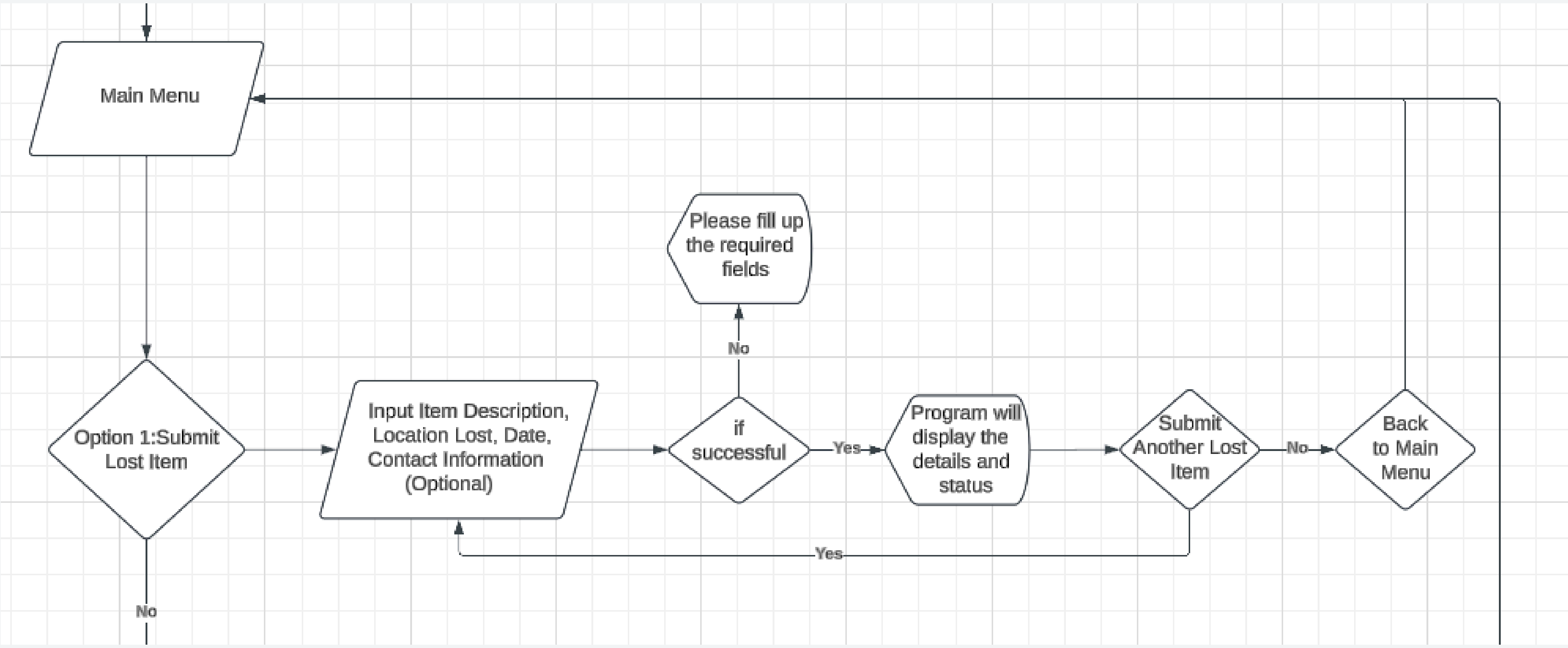

Main Menu
Please fill up the required fields
No
Option 1:Submit Lost Item
Input Item Description, Location Lost, Date, Contact Information (Optional)
if successful
Yes
Program will display the details and status
Submit Another Lost Item
No
Back to Main Menu
Yes
No

Figure 5.2: Flowchart of the Program: Main Menu and Option 1 (Submit Lost Item)

5. Procedure

Flow Chart

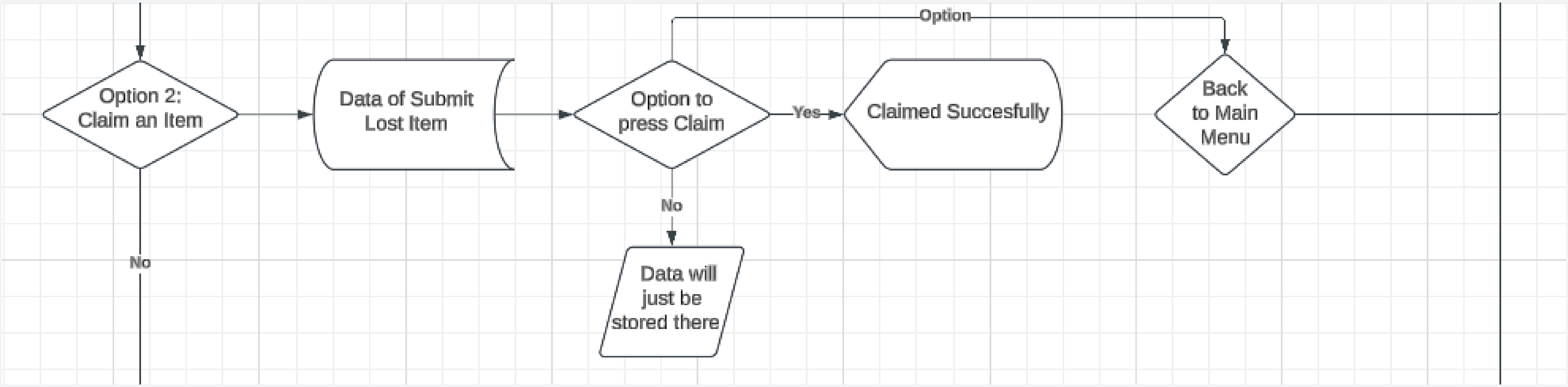


Figure 5.3: Flowchart of the Program: Option 2 (Claim an Item)

5. Procedure

Flow Chart

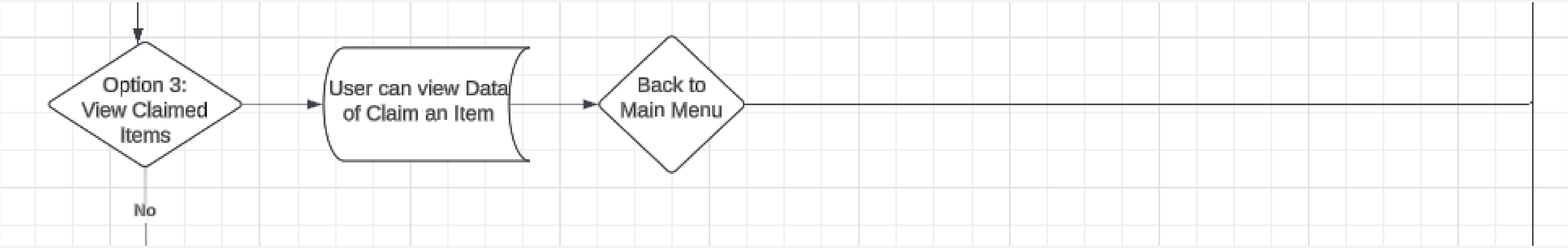


Figure 5.4: Flowchart of the Program: Option 3 (View Claimed Item)

5. Procedure

Flow Chart

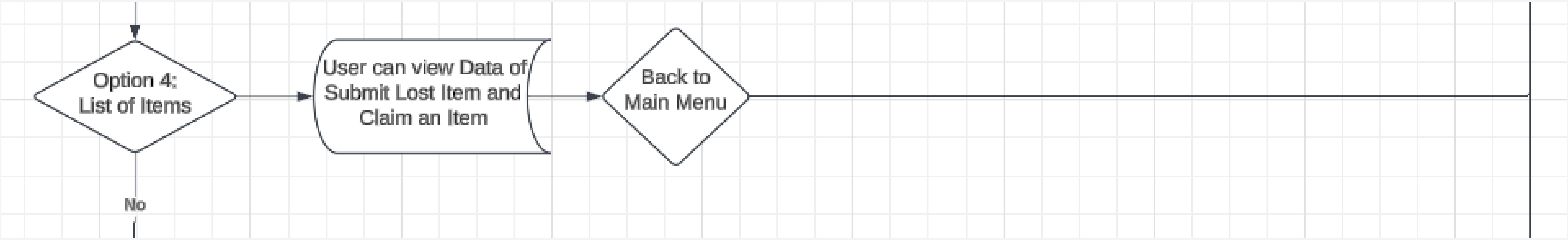
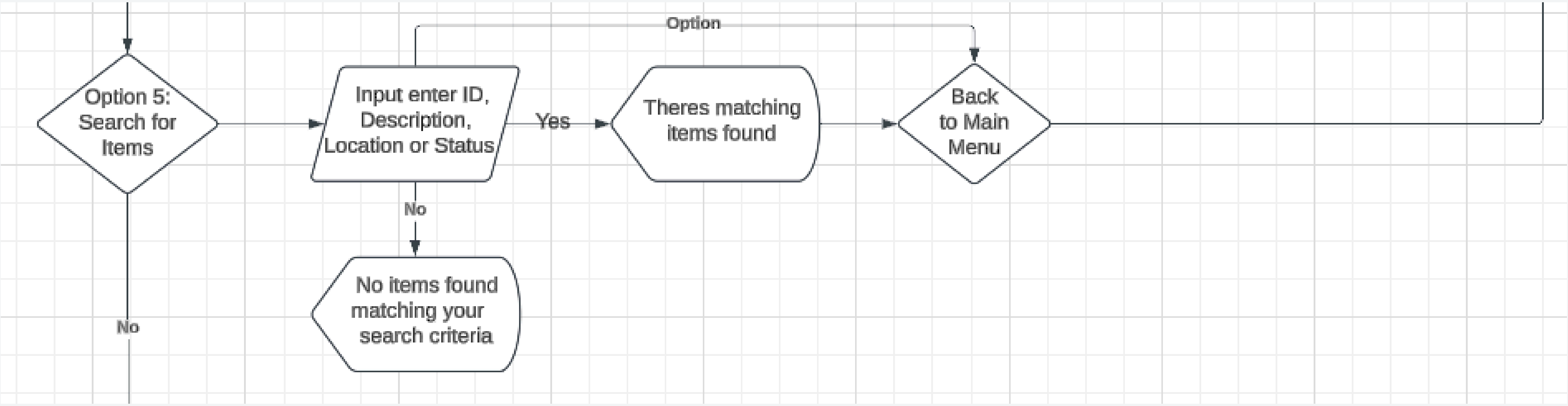


Figure 5.5: Flowchart of the Program: Option 4
(View Claimed Item)

5. Procedure

Flow Chart



Option 5: Search for Items
Input enter ID, Description, Location or Status
Option
Yes
Theres matching items found
Back to Main Menu
No
No items found matching your search criteria
No

Figure 5.6: Flowchart of the Program: Option 5 (Search for Item)

5. Procedure

Flow Chart

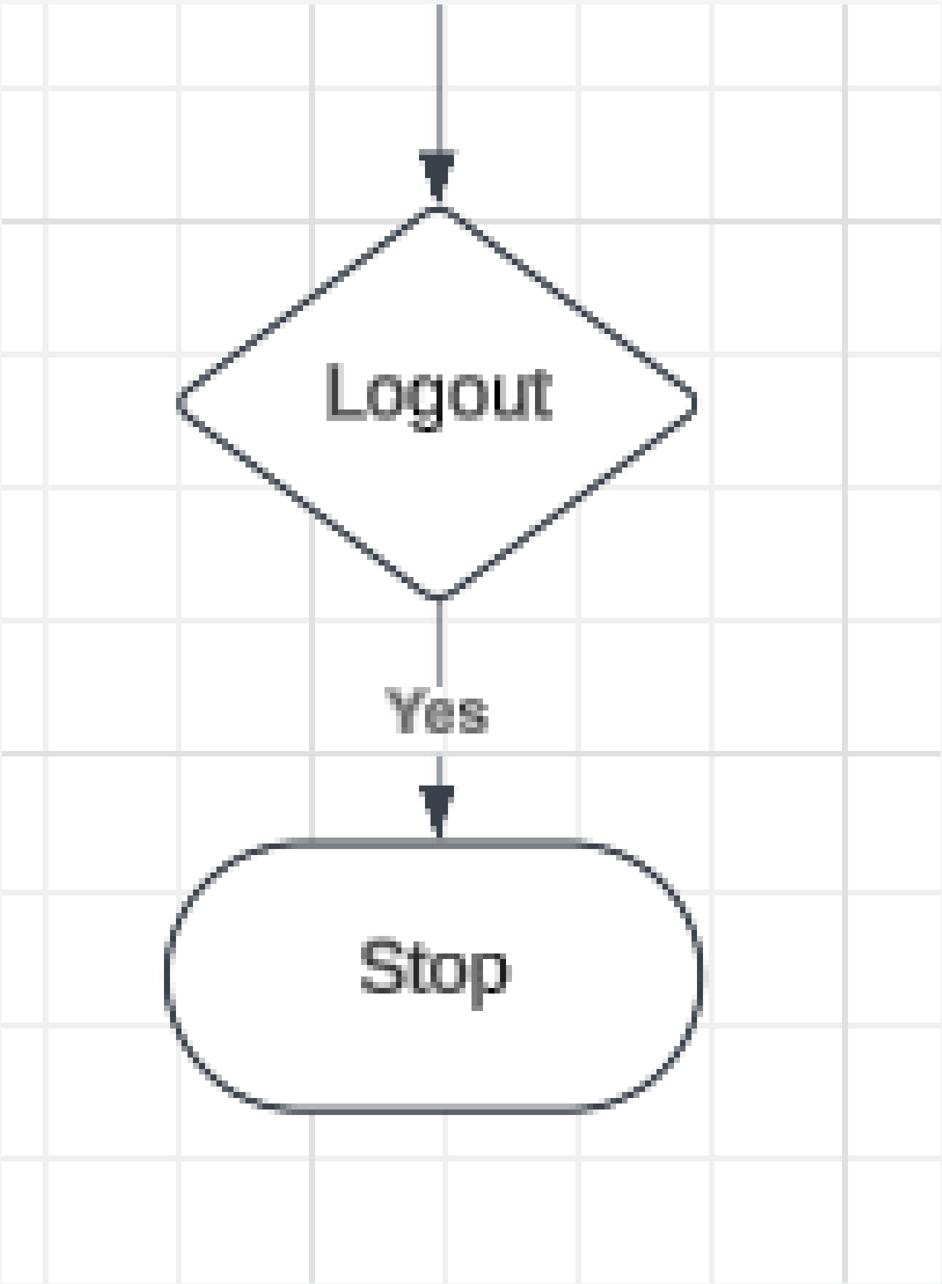


Figure 5.7: Flowchart of the Program: Option 6 (Logout) and end of the program

6. OUTPUT

7. Conclusion

In conclusion, the objectives of Lost and Found Management System realize effective strategies of the intended learning outcomes. This project presents requirement to provide a cohesive visually oriented interface design for the end users in python and its user-friendly nature. The system improves the aid of item classification, statuses, and the introduction of item tracking processes to enable quick return of lost objects. The efficiency could also be increased by the features like a keyword search, layered search of text, date and type of an item, as well as better correlations. In spite of possible difficulties with the input of user information as well as the use of different devices, the system is created to resolve those issues and in fact create a viable option for the loss and find items.

8. Recommendations

Audit Logs:
Add a feature to track user activities (e.g., submissions, edits, claims) for improved accountability and transparency.

Search Optimization:
Enhance search capabilities with advanced filters, fuzzy matching, and auto-suggestions for more accurate and faster results.

User Role Expansion:
Introduce administrator roles to manage reported items, verify claims, and oversee the database.

Affidavit Submission Requirement:
Introduce a feature requiring users to submit an affidavit of loss as proof before claiming an item. This enhances the system's reliability by ensuring the legitimacy of claims and providing additional accountability for item retrieval.

MEMBERS:

01 MAMARIL, JUSTIN KENNETH

02 REYES, ALEXZANDER

03 SAN JOSE, ALEXANDER

04 SAN JUAN, EDSON RAY

05 TITONG, LEE IVAN

THANK YOU