Programming language 1 Project
(Address Book System)
Semester I 2025/2026

Idea

Simple Address Book Application is a straightforward software solution designed to help users manage and organize their important contacts efficiently. This project aims to create an address book that allows users to store, and retrieve contact information seamlessly.

Requirements

At first, the system will show a menu that prompt user to choice what he/she want to do, as the following:

```
Welcome to our Address book, please to find what you want
    1. Add new contact.
    2. Search by name.
    3. Search by number.
    4. Delete contact by name.
    5. Delete contact by number.
    6. Show all contacts.
    7. Exit
Please to enter your choice:
```

After the menu is printed, user can enter any numbers, then the system will do an action depends on the entered value, as follow:

1. **If user enter 1**, the system will prompt user to input contact info, which are [name, type, and number], then store them in the system.
    a. In case of entered reserved number, reject the process.
    b. **{Bonus}** one contact may contains many numbers.
2. **If user enter 2**, the system will prompt user to input contact's name that you want to find, then print all contacts that match the following rules:
    a. whose name contains the input text.
    b. **{Bonus}** whose name similar to the input text. [for example, if entered value is 'mohamed', this will show names 'mohamad' AND 'mohamed']

3. **If user enter 3**, the system will prompt user to input contact's number that you want to find, then print all contacts whose number fully match the input number.
4. **If user enter 4**, the system will prompt user to input contact's name that you want to delete, then delete contacts whose name fully match to input name.
    a. In case of many matches, delete all matches, and print number of deleted contacts.
    b. In case of no matches, print "Not found" message.
5. **If user enter 5**, the system will prompt user to input contact's number that you want to delete, then delete contacts whose number fully match to input number, otherwise print "Not found" message.
6. **If user enter 6**, the system will show all stored contacts as a pair of (name, type, number), each contact in a single line.
7. **If user enter 7**, the system will exit.
8. **If user enter any other value**, the system will print error message.

Important Notes

While development process, you should validate the following:

- The user can store the number once, so don't forget to check any new number if stored before.
- Contact types must be only one of the following **[Family, Personal, Work, Other]**, if the user enter any other value, you should to consider it as **Other**, and print a message to user told him about this restriction.
- After each success task, you should print a message that told user the process is success.
- After each success task, the system should print the menu again, and ask the user to enter his/her new choice.

Deployment

This project should be in one java file, named with your **first name** then **your ID** (e.g. **Mohammed_220250000.java**).

Inside the java file, in the first line, you should have a comment that contains group details.

The group information that contains [Subject Section Number, full name and ID for each student].

The project could be max for two students, one of them should deploy the java file, the other should deploy a text file that contains the group information [named **group.txt**].

Deploy the file using class room.

Deadline for full project **26/2/2026**, and any delayed project will not accepted

The full mark is depending on some notes:

- Uploaded file name matching the structure name (Name_UniversityID.java)
- **Any Student copy code from other, both will get <u>Zero</u> mark**
- Required functions and applied functions.
- Any requirement that have a mark **{Bonus}**, could help you to have extra marks even you have some mistakes in other points.
- Final Discussion.

The project can be prepared by groups; each group contains only one or two students and each one should have his/her copy in the discussion.

Discussion

Each student will be discussed with all lines of code even he/she work as a group.

A report that descript the work distribution for student's group.

The due date for discussion is **<u>5/3/2026</u>**.

Lab Lecturer

- ✓ Eng. Mohammed Sh. Al-Dalo
- ✓ Eng. Mohammed Z. Al-Shorbajy
- ✓ Eng. Rewaa A. Dallol
- ✓ Eng. Ruba A. Al-Qedra

Subject Lecturer

- ✓ Eng. Jaffer M. Alagha
- ✓ Eng. Mohammed Z. Al-Shorbajy
- ✓ Eng. Rewaa A. Dallol

#For contact

Any student has any question about project, could contact directly with Lab lecturer that you belong in, but the message must start with the following **<u>(Your name, University ID, Section ID, Subject name)</u>**

We appreciate having a screenshot that clarifying your question

Good Luck ^_^