Title

Develop the Contact Management Program.

Background

N/A

Program Specifications

Write a program to manage contacts as follows:

Display the menu:

1. Add a contact

2. Display all contacts

3. Delete a contact

4. Exit

User's options:

1. If user chooses number 1, let them add a contact include ID (int), fullname(String), group(String), address(String), phone(String), lastName(String),firstname (String), In thereId is automatically inscreasing(means new contact has ID equal to last ID contact + 1), the first contact has ID: 1, firstname, lastname are taken from name by the first space .

2. If user chooses number 2, program will display the list of following data:

ID	Name	First Name	Last Name	Group	Address	Phone
1	Iker Casillas	Iker	Casillas	Star	Spain	1234567890
2	John Terry	John	Terry	Star	England	1234567890
3	Raul Gonzalez	Raul	Gonzalez	Star	Spain	1234567890

3. If user chooses 3, program will require to enter the contact ID which needs to be deleted, if ID does not exist, program will display a message as "No found contact".

4. If user chooses number 4: Exit the program.

Note: A phone number only has the following format:

- 1234567890
- 123-456-7890
- 123-456-7890 x1234
- 123-456-7890 ext1234
- (123)-456-7890
- 123.456.7890
- 123 456 7890

Function details:

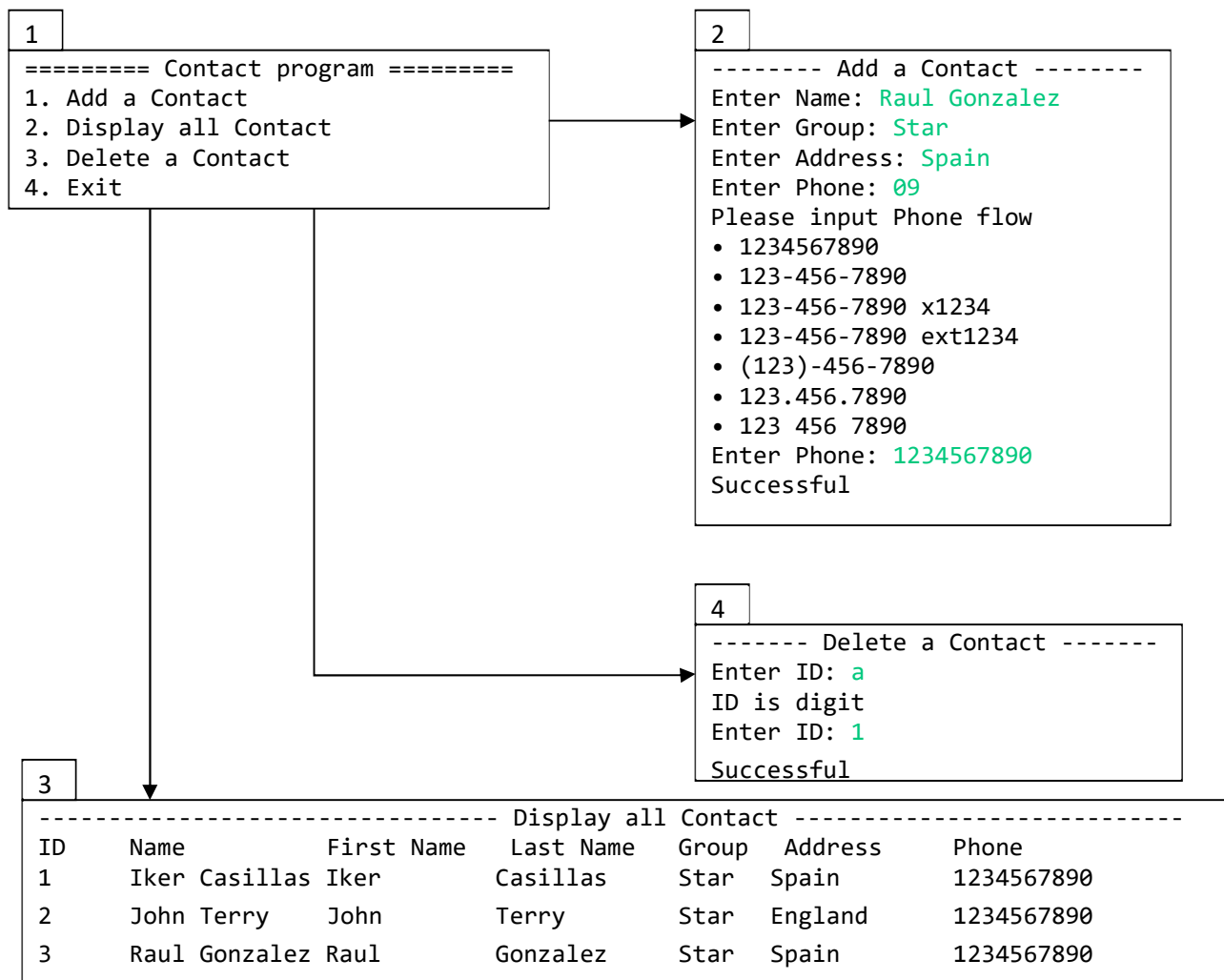**Function 1:** Display a menu and ask users to select an option.

- User runs the program. The program prompts users to select an option.
- User selects an option, perform **Function 2**.

Function 2: Perform function based on the selected option.

- Option 1: Add contact

- o Require to input task information including "name, group, address, phone".
- o Check valid data with the conditions below:
  - ▪ Phone number has to input the right format
- o Add contact to the program.
- o Return to the main screen.
- Option 2: Display the contact
  - o Display all the contacts
  - o Return to the program
- Option 3: Delete contact
  - o Require the ID which you need to delete
  - o Check valid data with the conditions below:
    - ▪ ID has to exist and is a number
- Option 4: Exit the program.

Expectation of User interface:

```
1
========= Contact program =========
1. Add a Contact
2. Display all Contact
3. Delete a Contact
4. Exit
```

```
2
-------- Add a Contact --------
Enter Name: Raul Gonzalez
Enter Group: Star
Enter Address: Spain
Enter Phone: 09
Please input Phone flow
• 1234567890
• 123-456-7890
• 123-456-7890 x1234
• 123-456-7890 ext1234
• (123)-456-7890
• 123.456.7890
• 123 456 7890
Enter Phone: 1234567890
Successful
```

```
4
------- Delete a Contact -------
Enter ID: a
ID is digit
Enter ID: 1
Successful
```

```
3
-------------------------------- Display all Contact ----------------------------
ID      Name            First Name   Last Name    Group   Address     Phone
1       Iker Casillas Iker           Casillas     Star    Spain       1234567890
2       John Terry    John           Terry        Star    England     1234567890
3       Raul Gonzalez Raul           Gonzalez     Star    Spain       1234567890
```

Guidelines

Student must implement methods
- addContact

- displayAll

- deleteContact

in startup code.

Suggestion:

Function 1: Add a contact.

    ○ Implement the function: public boolean addContact(List<Contact> list, Contact contact)

- Input:
  - ➢ list: where contains the contacts
  - ➢ contact: Contact's information.
- Return value: to be more one contact status.

Function 2: Display the contacts list.

    ○ Implement the function: public void displayAll(List< Contact > list)

- Input:
  - ➢ list: Contact list
- Return value: void.

Function 3: Delete contact

    ○ Implement the function: public boolean deleteContact(List<Contact> list, Contact contact)

- Input:
  - ➢ list: list of contact.
  - ➢ contact: the contact which we want to delete.
- Return value: Delete contact status