

COSC 24L3: Lab Assignment #7
Computer Science Department @ Dallas Baptist University
Fall 2023

Write a program that uses an **ArrayList** of parameter type **Contact** to store a database of contacts. The **Contact** class stores the contact's first and last name, phone number, and email address. Add appropriate accessor(**get**) and mutator (**set**) methods. Your database program should present a menu that allows the user to (0) *Quit the program*, (1) *add a contact*, (2) *display all contacts*, (3) *search a contact by its name and display it*, or (4) *search for a specific contact by name and delete it*. The search should find the first contact who has the same name as user input. Use the "for-each" loop to iterate through the **ArrayList**.

Sample run:

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

1

>>> Add a Contact <<<

Please enter first name: John

Please enter last name: Smith

Please enter phone number: 1234567890

Please enter e-mail: johns@dbu.edu

>>> Contact added <<<

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

1

>>> Add a Contact <<<

Please enter first name: john

Please enter last name: williams

Please enter phone number: 2223334567

Please enter e-mail: johnw@dbu.edu

>>> Contact added <<<

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

2

>>> All contacts <<<

Smith, John. 1234567890, johns@dbu.edu

williams, john. 2223334567, johnw@dbu.edu

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

3

>>> Search a Contact <<<

Please enter the first name: john

Please enter the last name: williams

>>> Found <<<

williams, john. 2223334567, johnw@dbu.edu

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

1

>>> Add a Contact <<<

Please enter first name: Joe

Please enter last name: Lee

Please enter phone number: 1113335678

Please enter e-mail: joel@dbu.edu

>>> Contact added <<<

Choose from the following:

- 0) Quit
- 1) Add new contact
- 2) List all contacts
- 3) Search contacts by name and display
- 4) Search contacts by name and remove

3

>>> Search a Contact <<<

Please enter first name: john

Please enter last name: doe

>>> Not Found <<<

Choose from the following:

- 0) Quit
 - 1) Add new contact
 - 2) List all contacts
 - 3) Search contacts by name and display
 - 4) Search contacts by name and remove
- 4

>>> Remove a Contact <<<

Please enter first name: john

Please enter last name: smith

>>> Found and Deleted <<<

Choose from the following:

- 0) Quit
 - 1) Add new contact
 - 2) List all contacts
 - 3) Search contacts by name and display
 - 4) Search contacts by name and remove
- 2

>>> All Contacts <<<

williams, john. 2223334567, johnw@dbu.edu

Lee, Joe. 1113335678, joel@dbu.edu

Choose from the following:

- 0) Quit
 - 1) Add new contact
 - 2) List all contacts
 - 3) Search contacts by name and display
 - 4) Search contacts by name and remove
- 4

>>> Remove a Contact <<<

Please enter first name: iron

Please enter last name: man

>>> Not Found <<<

Choose from the following:

- 0) Quit
 - 1) Add new contact
 - 2) List all contacts
 - 3) Search contacts by name and display
 - 4) Search contacts by name and remove
- 8

>>> Invalid option, please input again <<<

Choose from the following:

- 0) Quit
 - 1) Add new contact
 - 2) List all contacts
 - 3) Search contacts by name and display
 - 4) Search contacts by name and remove
- 0

Bye!