## CECS 174 – Project 5

## Rolodex

Create a class that represents a Person. A Person has a first name, last name, phone number, address, city, zip-code, and state, all of which are private. Make methods (including get and sets) to allow access to your Person instance variables. Make a method to display a person. Use a static variable and static methods to keep track of how many Person objects have been created.

In your main class, create an array of 25 people. Allow the user to choose how they would like to input a Person into the array. Use method and constructor overloading to allow multiple ways of creating, altering, and searching for a Person.

Create functions and menu options to:

- 1. Create and add a person to the array. Make sure that you do not allow the user to enter more than 25 people into the array.
  - a. Add by First and Last Name.
  - b. Add by Phone Number and First and Last Name.
  - c. Add by Address, City, State, Zip-Code, and First and Last Name.
- 2. Search for a person and display all of the information stored on them. If there are multiple people in the array with the same search information, list all of them.
  - a. by First Name
  - b. by Last Name
  - c. by Zip-Code
- 3. Alter a person by first searching for their spot in the array and then allowing the user to re-enter data about them.
  - a. Find by First and Last Name, then display a menu that allows the user to enter any information available. Repeat this menu until they are done.

Use the static variable keeping track of how many Person objects there are to index the array when you are placing a new Person in the list. You can also use it to shorten your search length.

## **Example Output:**

Rolodex Menu:

Add Contact Enter First Name

2. Search for Contact Homer

3. Modify Contact Enter Last Name

4. Quit Simpson

1 Enter Address
Add Menu: 742 Everareen Terrac

Add Menu: 742 Evergreen Terrace
A. First and Last Name Enter City

B. Name and Phone Number Springfield
C. Name and Address Enter Zip-Code

12345

Enter State

ΤL

Rolodex Menu:

- 1. Add Contact
- 2. Search for Contact
- 3. Modify Contact
- 4. Quit

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Search Menu:

- A. Search by First Name
- B. Search by Last Name
- C. Search by Zip-Code

В

Enter Last Name

Simpson

Homer Simpson

742 Evergreen Terrace Springfield 12345 IL

Lisa Simpson 555-1212

## Rolodex Menu:

- 1. Add Contact
- 2. Search for Contact
- 3. Modify Contact
- 4. Quit

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Enter First Name

Herman

Enter Last Name

Munster

Herman Munster

131-1313

Is this the person you want to modify? (Y/N):Y

Modify Menu:

- A. Enter First Name
- B. Enter Last Name
- C. Enter Phone Number

- D. Enter Address
- E. Enter City
- F. Enter Zip-Code
- G. Enter State
- Q. Save and Quit

D

Enter Address

1313 Mockingbird Lane

Modify Menu:

- A. Enter First Name
- B. Enter Last Name
- C. Enter Phone Number
- D. Enter Address
- E. Enter City
- F. Enter Zip-Code
- G. Enter State
- Q. Save and Quit

Q

Saving...

Rolodex Menu:

- 1. Add Contact
- 2. Search for Contact
- 3. Modify Contact
- 4. Quit

2

Search Menu:

- A. Search by First Name
- B. Search by Last Name
- C. Search by Zip-Code

В

Enter Last Name

Munster

Herman Munster

131-1313

1313 Mockingbird Lane

Rolodex Menu:

- 1. Add Contact
- 2. Search for Contact
- 3. Modify Contact
- 4. Quit

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Quitting...