**CSCI 470/502 Assignment 5 – Address Book Application Fall 2018**

**75 points**

**This program is a test as to whether or not you can enhance an existing application given a minimum of description and one of the classes necessary. Good luck!**

**Operation**

* If the user selects the first menu option, the application displays the email addresses and phone numbers that have been saved. Then, it displays the menu again.
* If the user selects the second menu option, the application prompts the user to enter a name, email address, and phone number. Then, it displays the menu again.
* If the user selects the third menu option, the application exits.

**Specifications**

* Use the AddressBookIO class that is provided to get and save entries. This class contains two static methods that you can use to read and write data to the address\_book.txt file. They are:

// get a String that displays all entries in columns

public static String getEntriesString()

// save an AddressBookEntry object to the file

public static boolean saveEntry(AddressBookEntry entry)

If necessary, you can open the address\_book.txt file in a text editor to debug this application.

* Create a class named AddressBookEntry to store the data for each entry. This class should contain these instance variables:

private String name;

private String email;

private String cellNumber;

And it should contain get and set methods for each of these instance variables.

* Create a class named AddressBookEntryApp. This class should display the menu and respond to the user’s menu choices using the AddressBookEntry and AddressBookIO classes as necessary.
* Create a class named Validator that contains static methods that can be used to validate the data in this application. The user should only be able to select one of the menu choices, and the user must enter some text for name, email, and cell number.

**Completely document your classes and methods as described in the Coding and Documentation Guidelines.**

**Submit your individual .java files on Blackboard before the due date and time. Please do NOT include the .txt file.**

**Sample Output on the Console**

Welcome to the Address Book Application

1 - List entries

2 - Add entry

3 - Exit

Enter Menu Number: 1

Name email Phone

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Bill Gates bill@microsoft.com (111) 222-3333

Larry Ellison larry@oracle.com (444) 555-6666

Steve Jobs steve@apple.com 777-888-9999

1 - List Entries

2 - Add Entry

3 - Exit

Enter Menu Number: 2

Enter Name: Grace Hopper

Enter email Address: grace@hopper.com

Enter Phone Number: 800-221-5528

This entry has been saved.

1 - List Entries

2 - Add Entry

3 - Exit

Enter Menu Number: 1

Name email Cell Number

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Bill Gates bill@microsoft.com (111) 222-3333

Larry Ellison larry@sun.com (444) 555-6666

Steve Jobs steve@apple.com 777-888-9999

Grace Hopper grace@hopper.com 800-221-5528

1 - List Entries

2 - Add Entry

3 - Exit

Enter Menu Number: 3

Goodbye.