Individual Assignment

Shell Programming

Background



A Linux-based software tool is required to allow a local company to keep track of all of its business contacts.

The owner is particularly interested in keeping track of each business name, contact person's full name, address, mobile number, and email address.

Based upon the above information the owner would like to be able to **search** for particular business entries, **add** new business contacts and **remove** old contacts from their own system.

This tool should also provide the user with the ability to **e-mail** (1) **any** and (2) **all** of the contacts listed in the address book with details of upcoming sales or discount offers etc.

Assignment

Develop a "menu driven" shell program that will allow the user to interactively update (i.e. add, remove), search and list all their business contacts information, which is stored locally in a file called **BusinessDetails**.

The format of the "BusinessDetails" file should take the following format:

<Company Name> <Contact First and Last Name> <Postal Address> <Contact phone Number> <Email Address>

Figure 1

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Guidelines

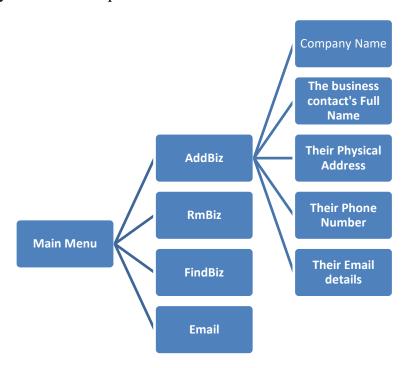
The following shell-programming assignment comprises of 4 separate functional components (separate shell programs).

1. The first script called **AddBiz**, should be a standalone script that will update the Address Book file with details of a new business

This script should take five command line arguments, as shown in Figure 1 above

- 2. The second script called **RmBiz** should remove all of a business's information from the "AddressBook" based on a particular businesses name or contact name.
- 3. The third script should allow the user to search for an existing business based upon any of that businesses information. Call this script **FindBiz**.
- 4. The final and most important part of this assignment is to develop a script called **Menu**.

This script will present the user with a command line menu as seen in Figure 2. This menu will allow the user to select from any of the previously mentioned shell scripts (i.e. **AddBiz**, **RmBiz** and **FindBiz**) and a fourth feature which will allow the user to e-mail any or all the companies listed in the Address Book.



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Welcome. Please choose one of the following:

- 1. Add a new Business
- 2. Remove an existing Business
- 3. Search for a Business
- 4. E-mail Business(es)

Enter a Number:

Figure 2

You should also consider:

- Descriptive use of commenting in your files
- Good use of spacing and indentation in your files
- Clear, attractive and easy to follow output to the user
- Correct use of exit status
- Error checking: duplication of listings is this OK or not? valid user menu choice; valid email address; is a user allowed enter blanks? if any details are duplicate in the address book, how can this be presented to the user to filter? Are search terms case insensitive?
- Can a user return to the main menu from any point?

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