

COMP311 (Linux OS Lab) Final project
Due Date Wednesday 8/08/2018 (by 11:00 AM)

Under your home directory, create a directory called 'Final_project' and underneath it do the following:
Write a shell script called *mycontacts* that when executed displays the following four choices:
(Your script should work on your own created student file called *students*)

1. Add student

This option allows the admin to create a new student containing the following items:

- a) *student id*: a **unique** number made of **exactly 5 digits**. Id numbers that are already in use as well as id numbers that contain anything other than five digits should be continuously rejected until a unique id of the correct format is entered.
- b) *Full name*: Full name of the student to be added (First name and Last name).
- c) *Phone number*: Should be in the format `xx-xxxxx` where each `x` is a digit. Phone numbers that have chars other than digits or that are not in the correct format should be continuously rejected until a phone number with the correct format is entered.
- d) *Date of birth*: should be in format `xx/xx/xxxx` like (02/10/1992) where each `x` is a digit. Date of birth that have chars other than digits or that are not in the correct format should be continuously rejected.
- e) *Email Address*: This should be automatically added to each student using the first 2 letters of his/her first name followed by the first 2 letters of his/her last name followed by the first and last digits of their id number. You can assume the domain name to always be `birzeit.edu` (e.g. if first name is Ahmad and last name is Mursi and id number is 12345 then the email address should be `ahmu15@birzeit.edu`).

The admin should be able to add as many students as he/she wishes.

2. Modify student

This option gives the admin three choices:

a) Delete a student

A student entry should be deleted according to a given id number (*exact number and not part of it*). If the given id number does not exist, a suitable message should be displayed.

The admin should be able to delete as many students as he/she wishes.

b) Delete all students

Selecting this option deletes all the student entries that have been added to the system.

c) Modify student info

Selecting this option will allow the admin to select whether to modify the phone number or the last name of the student (Those are the only two items that are open for modifications) and

make the necessary modification. New phone numbers should be checked for the correct format as mentioned in the add section above.

The admin should be able to modify/delete as many students as he/she wishes.

3. Search student

This option gives the admin three choices:

a) Search by id number

All user information (Name, id, phone #, email address, date of birth) should be displayed in a suitable and organized format according to a given id number. If the given id number does not exist, a suitable message should be displayed.

The admin should be able to search for as many students as he/she wishes.

b) Search by name

The admin should be given a choice to search by first name or last name and if more than one match is found for either, the info for all the students that match should be displayed sorted by the first name of the student. Admins may also enter a part of a name (first or last) and any matches should be displayed sorted by first name.

c) Search by date of birth

All user information (Name, id, phone #, email address, date of birth) should be displayed Ascending sorted for id.

The admin should be able to add, modify, or search for students in any order and as many times as he/she wishes during the same session of executing the mycontacts script.

*Be sure to use the same names for your shell script(s) and options as given above and to make your shell script(s) **as modular as possible**. Also, be sure to include any error checking necessary.*

*Be sure to have your script(s) ready by the due date and time in the project directory under your system home directory as described above (**All pass offs will be done on the server (172.16.2.90). Projects on any other media (personal laptops, ... will NOT be accepted**).*

Any students working together on any part of this project will receive a zero grade for the whole project.

No projects will be accepted after the due date and time 08/08/2018 (by 11:00 AM) : No exceptions.