

Yelp Application

This application allows users to search for businesses and users on Yelp, make friends with other users, and write reviews for businesses. It has a command line interface with a hierarchical menu.

Installation

To run the application, simply download the .py file and type “python Assignment7.py” in the terminal to directly run. After running the program, a message with log in name “s_ziyingp” and password will show as below.

```
PS Microsoft.PowerShell.Core\FileSystem::\\freesia.csil.sfu.ca\userdata\ziyingp\Desktop> python Assignment7.py
SQL Server standard login name = s_ziyingp
The password for this login name = 4d6aM6EthHH33GLT
```

Functions

Login

This function allows the user to log in to the interface to have access to all other functionalities. The user must enter a valid user ID. Here is a successful log in example of user with ID: __hr-GtD9qh8_sYSGTRqXw. After user successfully log in, the command line interface with functions menu will also show together. User can press 0 to 4 to choose different function.

Example shows below:

```
PS Microsoft.PowerShell.Core\FileSystem::\\freesia.csil.sfu.ca\userdata\ziyingp\Desktop> python Assignment7.py
SQL Server standard login name = s_ziyingp
The password for this login name = 4d6aM6EthHH33GLT
Please provide your user ID: __hr-GtD9qh8_sYSGTRqXw
Successfully logged in as user __hr-GtD9qh8_sYSGTRqXw.
Welcomt! Please make a selection from following function:
Press 0 to exit/terminate the program
Press 1 to search busniess
Press 2 to search user
Press 3 to make friend
Press 4 to write a reievew
please select from 0 to 4: █
```

Exit/terminate the program

This function provided for user exit this program. User will log out the program when they choose “0”. Example shows below:

```
Press 0 to exit/terminate the program
Press 1 to search busniess
Press 2 to search user
Press 3 to make friend
Press 4 to write a reievew
please select from 0 to 4: 0
○ -----Exit the program-----
PS Microsoft.PowerShell.Core\FileSystem::\\freesia.csil.sfu.ca\userdata\ziyingp\Desktop> █
```

The program will keep user to log in until user press “0” to exist. (Or press CTRL+C)

Search Business

This function allows the user to search for businesses that satisfy certain criteria. User set the minimum and maximum number of stars, city, and name (or a part of the name) as their search criteria. After the search is complete, a list of search results will show on the terminal. The list must

include the following information for each business: id, name, address, city, and number of stars. The results are ordered by name. Example shows below:

```

please select from 0 to 4: 1
-----Jumping to search business function-----
Please provide the minimum stars, or hit enter to skip: 3
Please provide the maximum stars, or hit enter to skip: 4
Please provide the name of the city, or hit enter to skip: EDMONTON
Please provide the name of the business, or hit enter to skip: tim
The minimum number of stars you entered is: 3
The maximum number of stars you entered is: 4
The city you entered is: EDMONTON
The business name you entered is: tim
Here is the search result:
-----
ID          Name          Address          City          Stars
-----
1rN5J1Juo3VtpuS49pDQ Chatime 9948 137 Avenue- Suite 104 Edmonton 4.0
AZ2nMTQYWTUPGyHs78MUQ Chatime 10485 Jasper Avenue Edmonton 3.5
qwoCL9Qh0s27XnhvDacbm Chatime 10538 82 Avenue NW Edmonton 3.0
3gTZAQmML02T1L5gYIHvQ Kabasa The Ultimate Cuisine 5932 153 Avenue NW Edmonton 4.0
J3kwhAHAKY3Yp8u7_C1jUA Old Timers Cabin 9430-99 Street NW Edmonton 4.0
FFUZOVeIA8a608aHcGS2sQ Optimum Health Vitamins 7115 - 109 Street- Suite 2 Edmonton 4.0
ScuH3iszoWWhkbEc7Ps1JQ Prime Time Donair 3928 17 Street NW Edmonton 3.5

```

If the search result are empty, a message “-----Sorry, the search result is empty.-----” will show as below:

```

please select from 0 to 4: 1
-----Jumping to search business function-----
Please provide the minimum stars, or hit enter to skip: 9
Please provide the maximum stars, or hit enter to skip: 4
Please provide the name of the city, or hit enter to skip: 5
Please provide the name of the business, or hit enter to skip: aaa
The minimum number of stars you entered is: 9
The maximum number of stars you entered is: 4
The city you entered is: 5
The business name you entered is: aaa
Here is the search result:
-----Sorry, the search result is empty.-----

```

Search Users

This function allows the user to search for users that satisfy certain criteria. A user is able to set the following filters as their search criteria: name (or a part of the name), useful (yes/no), funny (yes/no), and cool (yes/no). The search is not case-sensitive. The user is considered useful, funny, or cool if they have a value greater than zero for the corresponding attribute. After the search is complete, a list of search results will be shown on the terminal. The list include the following information for each user: id, name, useful (yes/no), funny (yes/no), cool (yes/no), and the date when the user was registered at Yelp. Example shows below:

```

please select from 0 to 4: 2
-----Jumping to search users function-----
Please provide the user name key word: jack
Please provide if the user is useful or not, any number larger than 0.0 for useful, otherwise not: 9
Please provide if the user is funny or not, any number larger than 0.0 for funny, otherwise not: 0
Please provide if the user is cool or not, any number larger than 0.0 for cool, otherwise not: 2
ID          Name          Useful  Funny  Cool  Date of register
-----
aNHd5ry2ZQZs4d16CaRLCg Jack yes no yes 2014-12-17 02:08:00
ckvxqh5FrPHbbyDKBMkWA Jack yes no yes 2012-11-24 03:24:39
EBN1CcV763Qmqn61gmVSEA Jackie yes no yes 2015-12-03 17:31:36
n1j153v5K3W57S1E1dkBCQ Jackie yes no yes 2019-01-23 03:33:02
uOW4NqvZNUQSWzSL_LC2A Jackie yes no yes 2015-07-19 22:45:18
-----End of the list-----

```

If the search result is empty, an message “-----Sorry, the search result is empty.-----” will be shown to the user.

Make Friend

A user must be able to select another user from the results of the function Search Users and create a friendship. After user enter the user’s ID in a terminal, the selected user will be a friend of the user that is logged in the interface. The friendship should be recorded in the Friendship table.

For this function here are three different cases shows below:

- Invalid user ID inputted: Message “-----Invalid user ID: Example of invalid user id input. Please enter a valid user ID.-----” will show as below:

```

Which user above you want to make friend with? Please provide their user ID: jajaj
-----Invalid user ID: jajaj. Please enter a valid user ID.-----
Which user above you want to make friend with? Please provide their user ID: Example of invalid user id input
-----Invalid user ID: Example of invalid user id input. Please enter a valid user ID.-----
Which user above you want to make friend with? Please provide their user ID:

```

- Two users have friendship already: Message “-----You guys already have friendship.-----” will show as below:

```

please select from 0 to 4: 3
-----Jumping to make friend function-----
Please provide the user name key word:jack
Please provide if the user is useful or not, any number larger than 0.0 for useful, otherwise not: 0
Please provide if the user is funny or not, any number larger than 0.0 for funny, otherwise not: 1
Please provide if the user is cool or not, any number larger than 0.0 for cool, otherwise not: 1
ID          Name          Useful    Funny    Cool    Date of register
-----
so-grmRbNM1hzrV9cgD5Xg Jackson    no       yes     yes     2015-05-04 04:28:05
-----End of the list-----
Which user above you want to make friend with? Please provide their user ID: aNHd5ry2ZQZs4d16CaRLCg
-----You guys already have friendship.-----

```

- Add friend successfully: Message “-----User with id: aNHd5ry2ZQZs4d16CaRLCg have become friend with you.-----” will show as below:

```

please select from 0 to 4: 3
-----Jumping to make friend function-----
Please provide the user name key word:jack
Please provide if the user is useful or not, any number larger than 0.0 for useful, otherwise not: 1
Please provide if the user is funny or not, any number larger than 0.0 for funny, otherwise not: 0
Please provide if the user is cool or not, any number larger than 0.0 for cool, otherwise not: 1
ID          Name          Useful    Funny    Cool    Date of register
-----
aNHd5ry2ZQZs4d16CaRLCg Jack    yes     no     yes     2014-12-17 02:08:00
ckvxqh5FrPHBbiYDkBMkWA Jack    yes     no     yes     2012-11-24 03:24:39
E8N1CcV763QWq61gmVSEA Jackie    yes     no     yes     2015-12-03 17:31:36
n1j153v5K3w5751E1dKbCQ Jackie    yes     no     yes     2019-01-23 03:33:02
uOw4NqvZNUOgSwzSL_LC2A Jackie    yes     no     yes     2015-07-19 22:45:18
-----End of the list-----
Which user above you want to make friend with? Please provide their user ID: aNHd5ry2ZQZs4d16CaRLCg
-----User with id: aNHd5ry2ZQZs4d16CaRLCg have become friend with you.-----

```

Write Review

A user should be able to write a review of a business. To write a review, a user must enter the business's ID in a terminal. The user must provide the number of stars (integer between 1 and 5). After the review insert successfully, the message “-----Successfully insert the review-----” will show as below. The review will be recorded in the Review table, considering the ID of the logged user and the current date. The Review table will update as below(second screen shoot).

```

please select from 0 to 4: 4
-----Jumping to write a reievew for busnises function-----
Please provide the business_id that you want to review for: _2vreQli4wZcSB_ytNuaqQ
Please give a star rating, must range from 1 to 5: 2
-----Successsfully insert the review-----

```

100 %								
Results		Messages						
	review_id	user_id	business_id	stars	useful	funny	cool	date
1	05bd2594-feb3-4200-b4f	__hr-GtD9qh8_sYSGTRqXw	_2vreQli4wZcSB_ytNuaqQ	2	0	0	0	2023-04-01 15:41:10.650
2	d5v2PrF_Gxc3lZpc4jJg	cWqtmDX1K3Ph80jYXIGISA	_2vreQli4wZcSB_ytNuaqQ	5	0	0	0	2017-04-08 00:10:53.000
3	DCGFz7T4ICk0XOgvNT2qlA	U37-5twAaKT9KJ1AwX6Cg	_2vreQli4wZcSB_ytNuaqQ	4	4	0	1	2016-01-03 21:49:53.000
4	qHofppqGoRrGGvt528EKGQ	Xy2plQX5HMI_3O7oUP6HLW	_2vreQli4wZcSB_ytNuaqQ	5	11	0	1	2015-06-07 02:24:30.000
5	RbjwLi-3ZuNbulVMSdg3Gw	B-8N0dAtknTHGdkwK7DNBw	_2vreQli4wZcSB_ytNuaqQ	4	0	0	0	2016-08-16 07:00:16.000
6	SBGgJC4CtP2jYO96hffOqg	QZYcroViZlhW7pwd2DsQZQ	_2vreQli4wZcSB_ytNuaqQ	5	0	0	0	2021-02-13 07:53:01.000
7	xiYMleFdbKBORHDz2s8PA	mOG5mkGewd88ix2cyxbrgQ	_2vreQli4wZcSB_ytNuaqQ	3	0	0	0	2018-03-11 19:59:12.000