USER DOCUMENTATION:

Trender is very easy to use and has a built in help function to explain each function.

We will provide only a tiny bit more detail here than in the actual

application.

SET UP:

First the YELP data set must be downloaded and loaded into an Oracle DB schema with the un/pw/connection type ('yelp','yelp', 'xe')

To download the YELP data set: http://www.yelp.com/dataset_challenge/

To run the application. Make sure you have properly formatted the YELP Schema after loading in the data set. The SQL files should also be included with the application file.

USING THE PROGRAM;

To run the program change your directory to the directory of the file 'app.py' and run the python 2.7.9 interpreter with the cx_Oracle package downloaded.

Sample session is included below.

```
C:\Users\Harold\Desktop\cs327e\project1>py -2.7 app.py

Welcome to Trender - Alpha

Enter an action: set filter

Enter your first state: IL
Enter your second state: AZ
Enter your start date: 12-01-2012
Enter your end date (Feb 21 2010 Format: 02-21-2010): 12-01-2014
Enter time interval (weekly, daily, monthly, yearly): monthly
Enter your categories: food

Enter an action: go

IL
Date Range: 01-DEC-2012 01-JAN-2013
Review Density: 0.0264317180617
Average Review: 4.5

Date Range: 01-JAN-2013 01-FEB-2013
Review Density: 0.0308370044053
Average Review: 4.21428571429

Date Range: 01-FEB-2013 01-MAR-2013
Review Density: 0.0352422907489
Average Review: 3.8125

Date Range: 01-MAR-2013 01-APR-2013
Review Density: 0.0176211453744
Average Review: 2.875

Date Range: 01-APR-2013 01-MAY-2013
Review Density: 0.0352422907489
Average Review: 3.8125

Date Range: 01-MAY-2013 01-JUN-2013
Review Density: 0.0286343612335
Average Review: 3.92307692308
```

This program creates a filter and we run it on the data set and it gives us the mean star rating of Yelp reviews over time and the density of reviews over time (#reviews in a week/month/year / #reviews in the entire time period studied)

HERE ARE OUR DESCRIPTIONS OF THE FUNCTIONS:

help – help function it will give you information about the functions you can perform with the program

state – this is a search functions for the states you can study. Type in a city or state initial. This will return a list of state initials. We can use these to create the filter. Separate multiple queries with commas

sample:

 states Champaign, Phoenix, PA

RESULTS:

```
Welcome to Trender - Alpha
Enter an action: states PA, Champaign
SEARCH RESULTS:

1 IL
2 PA

Enter an action:
```

category- this is a search function for the categories you can use in your filter. Type in a category you are interested in.   Separate multiple queries by commas.

```
Enter an action: categories food, medicine, hot dogs

SEARCH RESULTS:

1  Seafood Markets
2  Food Delivery Services
3  Seafood
4  Specialty Food
5  Traditional Chinese Medicine
6  Food Tours
7  Hot Dogs
8  Soul Food
9  Swiss Food
10 Do-It-Yourself Food
11 Food
12 Food Stands
13 Pub Food
14 Fast Food
15 Comfort Food
16 Food Banks
17 Food Court
18 Food Trucks
19 Ethnic Food
20 Sports Medicine
21 Internal Medicine
22 Live/Raw Food

Enter an action: _
```

set filter – plug in the information you want to apply to create your filter. Two states with state initials.

The time part of the filter works as follows. It takes the start date and adds increments of the time interval until it cannot add an increment of the time interval without passing the end date. The data between this last date and the end date will be ignored.

Categories should be comma separated.

Get filter- will return the current filter.

Go – will take the current filter and run it on the data set and it gives us the mean star rating of Yelp reviews over time and the density of reviews over time (#reviews in a week/month/year / #reviews in the entire time period studied)

Here is a sample where we will set a new filter.

```
C:\Users\Harold\Desktop\cs327e\project1>py -2.7 app.py

Welcome to Trender - Alpha

Enter an action: set filter

Enter your first state: AZ
Enter your second state: IL
Enter your start date (Feb 21 2010 Format: 02-21-2010): 12-01-2009
Enter your end date (Feb 21 2010 Format: 02-21-2010): 12-01-2014
Enter time interval (weekly, monthly, yearly): yearly
Enter your categories: food

Enter an action: go

AZ
Date Range: 01-DEC-2009 01-DEC-2010
Review Density: 0.143289577911
Average Review: 3.94629812438

Date Range: 01-DEC-2010 01-DEC-2011
Review Density: 0.199134321602
Average Review: 3.92044324478

Date Range: 01-DEC-2011 01-DEC-2012
Review Density: 0.179104899853
Average Review: 3.87316379719

Date Range: 01-DEC-2012 01-DEC-2013
Review Density: 0.212770170872
Average Review: 3.79816513761

Date Range: 01-DEC-2013 01-DEC-2014
Review Density: 0.267737920109
Average Review: 3.75105663567
```

```
IL
Date Range: 01-DEC-2009 01-DEC-2010
Review Density: 0.191409897292
Average Review: 3.75609756098

Date Range: 01-DEC-2010 01-DEC-2011
Review Density: 0.221288515406
Average Review: 3.79746835443

Date Range: 01-DEC-2011 01-DEC-2012
Review Density: 0.164332399627
Average Review: 3.85227272727

Date Range: 01-DEC-2012 01-DEC-2013
Review Density: 0.170868347339
Average Review: 3.80327868852

Date Range: 01-DEC-2013 01-DEC-2014
Review Density: 0.25034547152
Average Review: 3.46125461255

Enter an action: _
```

exit –self explanatory. Exit the function.

```
Enter an action: exit

Goodbye for now. See you soon.
```