EEP 773

Telecom Software Lab

Assignment 9

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1 Problem Statement

In this you need to use Python and git.

Using python make a code that searches emoticons through a file (pre-specified file) and the percentage of the number of times the emotion occured and also print the mood of the *user_1* available there in the file in the following format

$$user\_1 \ : \ @user\_2 \ statement$$

You can get your content file and reference file from `ttps://git`ub.com/shubhras01/Assignment9.git

The ouput should be printed in a file. Also you need to add your files back on the github online reppository created by you by the name *Assignment_9*.

2 Assumptions

I have taken following assumptions while preparing solution to the given problem statement :

1. The code made is optimized as per the provided file.
2. The content file fetched from the link in assignment are the final and reference files.
3. The lists I created include a perfect order as given in the dictionary reference file.

3 Logic Explanation

I have divided the complete problem statement into various modules and tried to understand, code and analyze these; collaborating to form the answer to the given problem statement. The complete logic and module description are as below :

3.1 The Python Code

3.1.1 TASK 1 - Printing the mood

The code made includes first opening the file using *open*() function a read mode. I have created a list for each of the 5 users viz A, B, C, E, G so as to count corresponding emotions associated with them. Using a function *line.split*() the complete line fetched through the file is broken into words which are then compared with the available emotions and on matching the lists are getting updated.

A function/method named *maximum*() is called in which all the list elements are compared with one another and the index wih maximum number associated with it is pulled out to return the mood.

The function is called for every user viz A, B, C, E, G.

3.2 TASK 2 - Printing percentage of different moods

The complete file opened again to scan each line here too and directly all the emotion symbols are compared with the words and the values are stored in a counter created for seperate emotion namely *emoHappy*, *emoSad* etc.

Then using simple mathematics and *print* command the result is displayed out.

4 Using Git

Here, firstly all the necessary file are forked from the link provided above in the problem statement into my github account. From there these files are cloned into the system local repository.

5 Screenshots

5.1 Screenshot 1 - Showing Final Output on Terminal

```
shobhit@administrator-desktop:~/Desktop$ ./jtm142267_9.py
A :  Sarcastic
B :  Happy
C :  Happy
E :  Happy
G :  Surprised
Mood_Happy : 28.5714285714  %
Mood_Sad : 0.0  %
Mood_Surprised : 17.8571428571  %
Mood_Sarcastic : 14.2857142857  %
Mood_Crooked : 10.7142857143  %
Mood_Neutral : 10.7142857143  %
Mood_Angry : 7.14285714286  %
shobhit@administrator-desktop:~/Desktop$
```

Figure 1: Shoing Terminal Output

References

[1] http://www.tutorialspoint.com/python/

[2] https://www.youtube.com/watch?v=4dVtFLkpRjc

[3] http://tex.stackexchange.com/questions

[4] https://www.sharelatex.com/learn