David Piper

12/15/2017

SI 206 Final Project Report

For the final project, my original goals were to track posts on Facebook that I had commented on and who liked my comments. I hoped to find who liked my comments the most. When viewing documentation on how the APIs for Facebook worked I realized that finding this much information on my comments would be difficult. Instead, I decided to track who liked and commented on my posts the most. In addition, I created another file to find data on what day and what time of day my posts are. I created two tables, one to show who liked and commented on my posts the most and another to show what time of day and what days I posted the most. To display this data, I used plotly to create three visualizations. I decided bar graphs would be the easiest way to show the data for each table. I made two bar graphs that show who comments on my posts the most and who likes my posts the most. Then, I made another bar graph that showed which time of day I posted the most, which was the “middle of the night” or between midnight and 3:59AM.

As seen in the table below, I used information that I learned in SI106, SI206 and from research online for my project. For my FinalProj206.py file, I use OAuth authorization which allows a third party website to access one’s Facebook information without logging in. When running the code, it opens a webpage with a link for the user to copy into terminal to verify their account information. My code then uses the data to track information on who comments and likes my posts. For my other file, facebookposts.py, I analyzed what time of day I post the most. This code runs without requiring a verification link because it does not use OAuth authorization. Overall, I enjoyed working on this project and was happy to use what I’ve learned in both python classes I’ve taken in the school of information for the project. Below are the links to my graphs:

Graph on who comments the most: https://plot.ly/~dpiper24/68.embed?share\_key=Y6ArGbMvGp865y1yLTAiRt

Graph on who likes my posts the most: https://plot.ly/~dpiper24/66.embed?share\_key=XdO8OUDJjbTIjobgauAQaG

Graph on what time I post the most: https://plot.ly/~dpiper24/72.embed?share\_key=My9cvhg4W1wsaJtQ6EqIRO

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Issue Description** | **Location of Resource** | **Result(did it solve the problem?)** |
| 12/8 | Accessing Facebook API, used info from lecture from 106 | https://paper.dropbox.com/doc/SI-106-Lecture-23-API-Keys-and-oAuth-ftGg0FEX3azorKXp1SBAq | yes |
|  | Using OAuth authorization | https://requests-oauthlib.readthedocs.io/en/latest/examples/facebook.html | yes |
| 12/9 | Accessing API nodes and objects. Used Facebook for developers website | https://developers.facebook.com/docs/graph-api/reference | yes |
| 12/12 | Used information on plotly website to learn how to create visualization | https://plot.ly | yes |
|  | Researched how to use datetime object with strftime() and strptime() for tracking time of my posts | https://docs.python.org/2/library/datetime.html#strftime-strptime-behavior | Yes |