Assignment Abstract:

For this assignment, we worked on collecting data from social media(Twitter) to complement our already existing data on flights, airports and airlines. Additionally, we also converted our previous database to NoSQL by connecting to a MongoDB server. Fr the first part of the assignment, we used the Twitter API to collect data on various topics related to our domain, including tweets about American Airlines (thing), Logan Airport (place), and pilots (people). We used Python to analyze this tweet data and determine what tags were most popular and trending within our domain. For the second half of the assignment, we imported our old data from Assignments 1 and 2, and along with our newly-collected twitter data, we converted everything into a NoSQL database. By connecting to a MongoDB server, we were also able to test and make sure some of database usecases worked and could provide information requested by the user.

Assignment 3 README: Converting SQL to NoSQL using MongoDB

1. All files necessary are provided in the folder. Jupyter notebook contains all parts of the assignment, including social media analysis and moving SQL database over to NoSQL. Two csv files provided are loaded in during one part of the assignment and contain data from Assignment 1.
2. Before running the notebook make sure you have installed Pymongo library in your local system. To install Pymongo framework run below mentioned command either in notebook or anaconda command prompt.  
     
   pip install pymongo  
     
   Install the latest verions for better compatibility with python 3.5
3. Every time you run this notebok you have to establish connection with mongoDb client to access the database we have created in the assignment notebook.
4. All related libraries should be present in the local. libraries such as Numpy, Pandas, Matplotlib.
5. Please run all the cells in a given order. Executing cells in random order might result in error.

Resources:

1. <https://stackoverflow.com/questions/30164478/tags-in-mongodb>

2. <https://docs.mongodb.com/manual/tutorial/configure-replica-set-tag-sets/>

3. <https://www.tutorialspoint.com/mongodb/mongodb_create_database.html>

4. <https://realpython.com/introduction-to-mongodb-and-python/>

5. <https://data-flair.training/blogs/python-stemming/>

6. <https://api.mongodb.com/python/current/>

7. <https://code.tutsplus.com/articles/mapping-relational-databases-and-sql-to-mongodb--net-35650>

LICENSE

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