

TDS3751 – Social Media Computing

Session 2 2021/2022

Assignment (Part 1)

OBJECTIVES

This assignment worksheet details the FIRST assignment component for the subject TDS3751 in Trimester 2220 with the following points:

- The assignment is to be done in groups of either four to five students.
- The final submission will be in the form of report (softcopy) alongside functional code uploaded into MMLS/Classroom

ASSIGNMENT TASKS

TASK 1

Determine your group members and register your group on MMLS (Google Classroom unfortunately still does not have a feature for creating and managing groups).

TASK 2

Discuss amongst your group mates to **identify a domain** you want to analyse in which you ALL are interested in. The domain you choose should be such that you can **find different brands inside** that each one of your group mates can analyse individually. For (*a really bad*) example, you could be interested in the domain of *Colours* and you can actually find four different companies called *Red, Yellow, Green* and *Blue*. Your choice of brand MUST have a social media presence on Twitter for you to perform the second part of the assignment later.

Each group should have their own domain and no repeated domains are allowed - to facilitate this, after entering your group members, proceed to [this link](#) to enter your selected domain, brands in that domain, and the student assigned to handling that brand.

TASK 3

As a group you have to first discuss and

- 3-1. **Determine five (5) metrics to monitor** across all the brands and justify the choice for that particular metric. The choice of metrics MUST NOT be one that is taken directly from Twitter/Tweepy functions. Example: "*friends_count*" shows all followers of a Twitter account and is NOT a good metric. You can however take *friends_count* value over two weeks and then plot the growth/shrinkage of followers as audience growth rate → simply said, use the values you can extract for further analysis as your metric

TASK 4

Each student in the group is then responsible for performing the following subtasks for their own brand in the groups' chosen domain

- 4-1. **Analyze the current social media channel** that the company is currently implementing as part of their marketing campaign (aside from Twitter). This maps and contributes to task 3-1 above but done on an individual brand scale.

- 4-2. **Perform collection and processing** of your own brand for a period of 5 days. Each student will end up with his/her/their own dataset of tweets from the respective brands [You may perform longer data collection but I am setting a minimum within range of a "assumed" limit on Twitter queries]
- 4-3. **Implement a simple dashboard** to visualize and compare all relevant metrics collected. The dashboard is to be implemented/coded using the tool of your choice however it should be clear how your data is being integrated/imported into the dashboard for visualization (need not be real-time/immediate can be done in batch style)
- 4-4. **Determine which brand amongst your selected ones succeeds** in using their social media channel and justify based on their performance in the metrics measured

DELIVERABLES

- 1) Code for individual students processing the brand's Twitter channel (including comments and citations to sources used if any) × number of members in group
- 2) Final dataset × number of members in group
- 3) Report and explanation of dashboard content (i.e. explanations of peaks, spikes, drops, why one brand has more X compared to Y etc)
- 4) Compare and conclude the levels of success each brand has across Twitter and determine which brand best implemented their online social media campaign.

RUBRICS

This assignment is allocated 50% for the total assignment marks for the course – i.e. 25 marks – with the remaining 50% to come from part 2. The breakdown for the tasks is as follows (subject to changes and normalization where and when necessary)

- Domain analysis 15%
- Data collection 15%
- Brand analysis and comparisons 10% (5 metrics × 2%)
- Dashboarding and reporting 10%

The tasks will be graded using the following rubrics based on the individual questions asked.

Incomplete 0%	Below average 25%	Partial 50%	Above average 75%	Complete 100%
No implementation and no output from execution	Incomplete solution with partial execution output	Implementation completed but execution does not correspond to requirements (i.e. wrong output, no output etc)	Completed implementation but with partially correct execution (i.e. errors generated, exceptions etc)	Completed implementation with proper execution as required

* where execution refers to either program running capability, processing output accuracy, justification, explanation etc.

DISCLAIMER: This assignment sheet is subject to changes and/or corrections due to mistakes and errors that were overlooked.