ISCS 540 – Big Data Analytics, Spring 2022
Group Project – Deliverable 2: Time and Location Analysis

For this deliverable of the group project, you will use R to perform simple time and location analysis and visualization on the data collected about your topic. Code snippets to assist you with this deliverable are attached to the assignment on Blackboard.

You will be submitting your team's R code and all generated plots in a zip file named **TeamName_Deliverable2.zip**

Following are the requirements for this deliverable:

1. Create a new R script file with a suitable name. In the comments at the top of the file, place your team members' names and the deliverable number. Make sure you continuously save your changes as you add to this script file. Add comments indicating which step each block of code addresses.

2. Write code that will create a bar plot to plot the number of tweets by **day of the week**. Save your plot as a .png file and a .pdf file.

3. Write code that will create a bar plot to plot the number of tweets by **date**. Save your plot as a .png file and a .pdf file.

4. Write code that will create a jitter plot without a boxplot to plot the number of tweets by day and hour. Save your plot as a .png file and a .pdf file.

5. Write code that will create a jitter plot with a boxplot to plot the number of tweets by day and hour. Save your plot as a .png file and a .pdf file.

6. Write code that will create a time series plot to plot the number of tweets you collected. You will need to use the "xts" package. Save your plot as a .png file and a .pdf file.

7. Write code to create a new data frame that will contain a copy of your cleaned tweet data frame. Write code that will remove all tweets that do not contain location data from the newly created data frame.

8. Write code to plot tweets by state on the map of the United States. Save your plot as a .png file and a .pdf file.

9. Write code to plot tweets by country on the world map. Save your plot as a .png file and a .pdf file.

10. Write code to plot tweets by country on an interactive world map using the "leaflet" package. Save your plot as a .png file and an .html file (web page).

Submit your work in the form of **a ZIP file** using the following format:
TeamName_Deliverable2.zip
Your zip file should contain 1 R script file, 8 png files, 7 pdf files, and 1 html file.

Only one person per group needs to submit the zip file.