Capstone 2 Project Proposal Springboard

**What is the problem you want to solve?**

Russia attacked Ukraine on February 24, 2022, after months of military preparation around the borders. Putin insists on calling it a special military operation while many believe it is a real war.

This war is having repercussions all around the world. Grain, a significant export product of Ukraine and Russia, has increased in price in trade. Since the start of the war, the energy market has been roiled, and the future seems bleak as the West gradually weans itself off Russian oil and gas. In geopolitics, Russia is almost certain to become more isolated, prompting it to strengthen its alliance with China, which, in turn, is treading carefully so as not to violate the sanctions placed on Russia. Countries that have not previously been members of NATO, such as Finland and Sweden, are now more willing to join the alliance as a result of Russia's aggression. As a result, we are witnessing a fundamentally changing world due to war.

The battle will have far-reaching consequences around the world, potentially bringing an end to the globalized era as we know it. It is critical that we collect the huge volumes of data being generated by this battle and extract lessons for future generations.

Goals

In order to preserve this historical horror, I will be launching a project that will track the evolution of the Twitter verse surrounding the Ukraine war. This project intends to perform natural language processing tasks (e.g., word cloud, sentiment analysis, topic modeling, etc.) on a regular basis to assist the public in keeping track of what aspects of the war people are discussing on Twitter and how they feel about them, essentially tracking Twitter users' changing views on the war.

To begin, this project will do sentiment analysis on each month since the commencement of the war. In addition to EDA and sentiment analysis, the initiative will use topic modeling to determine what the most pressing topics are among Twitter users.

Once numerous notebooks, say up to April data, are available, the initiative will attempt to automate the entire process so that the analyses are updated on a regular basis. The goal is to have many dashboards, each of which visualizes the Twitter verse in a certain time window (e.g., month) in an easy-to-understand manner for the general audience. The results might be displayed on a web application, although this is still in the works.

Our clients will be anyone who has an interest in the war or has been impacted by the war.

I will collect some data from twitter and Kaggle. I will create a GitHub repo containing the work I have completed for each step of the project.