

Project 3 Proposal for Group 4

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Topic: Recent political violence in Ukraine as a result of the Russian Invasion of Ukraine

Motivation:

Putin's invasion of Ukraine has been dominating the headlines for the past year because it has caused a rise in the price of energy and food supplies. The world watches with great attention to figure out what our future energy landscape is going to look like and how best to reduce the prices of basic goods and services in a global economy still recovering from the COVID supply shock. Our goal here is to track the specific incidents of battle and other forms of violence within the territory of Ukraine and to be able to categorize our data by date, time, type of incident, number of fatalities, and location.

Outline:

We would like to make a dashboard that allows us to filter incidents by type, time interval, location, and number of fatalities. We expect to be able to plot the total number of fatalities, number of fatalities by region, and type of warfare by region, and to have an option to create a map that will be able to mark the different incidents and give more information about them. The map will also perhaps include heat maps to reflect the densities of incidents and fatalities and will have filters that allow us to filter by type, date, and number of fatalities.

We would also like to use some geoJSON data to mark the boundaries of Ukrainian divisions and subdivisions to better help us understand the data.

Data sources:

ACLED DATA: <https://acleddata.com/data-export-tool/> (Downloaded CSV File in Slack. We will not be using an API, but we decided to use a static dataset.

Delegation of Duties:

Five webpages (including CSS):

- a. Dashboard: Raymond
- b. Introduction and Project Information: Japhet
- c. Project Members: Breanna
- d. Project Data: Sajid
- e. Map: Garrett

JavaScript Apps:

1. Graph 1: Raymond
2. Graph 2: Breanna
3. Graph 3: Japhet
4. Map: Garrett
5. Dashboard: Sajid

Types of Graphs:

1. Sunburst chart of type and subtypes of battle events (Fatalities as pointer).
2. Side-by-side bar chart of Ukraine and Russia and number of battles.
3. Line graph of number and type of battles by region.
4. Optional: Some aggregates categorical graphs

Filters: Month. Type of Battle. Region.

Map Filters: Type of Battle. Month. Fatalities