DS 3001 Final Project Proposal

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Team Info

• Name: The Flukes

• Project title: History of African Conflicts

• GitHub Repository

Background and Motivation

The Armed Conflict Location and Events Data project (ACLED) aims to collect data regarding political violence in developing states. They have collated an African data set which contains information about conflicts in Africa. Some attributes of the data set include dates, parties involved, number of fatalities, and types of conflicts.

Using this data set, we aim to create a tool which will be used to analyze the changing political landscape of African countries. We will have a map of Africa with an outline of the different countries and have circles of varying size that represent the number of casualties. Different colored circles will represent the different types of conflicts.

This tool could be used by schools, universities, and other educational institutions to teach and analyze conflicts in Africa for the past twenty years by visualizing the progression of African conflicts.

Project Objectives

- To demonstrate how conflicts change over time in Africa.
- To demonstrate whether the rate and extent of the conflicts have gotten better or worse over time
- To create an educational tool for users to analyze data patterns more efficiently
- To report specific information on conflicts such as the number of casualties, types of conflicts, etc in an easy to read format.
- Educational experience for the team in data processing and project development

Resources and Tools

Data Set

- The ACLED (Armed Conflict Location and Event Data) African Conflicts, 1997-2017
- We will experiment with searching for correlations with other data sets

Data Processing

For data processing, our goal will be to use analytical algorithms to identify statistics from our data sets such as central tendencies of casualties or rankings of the probabilities of particular pairs or groups of actors conflicting.

Data Toolkit

Tableau, Python, Pandas, Matplotlib, Numpy, D3.js, HTML/CSS, Javascript, Flask

Mock-Up Design

Main Interface Visualization

Timeline at the bottom will play through each year to demonstrate conflict over time. Red dots will represent conflict location and will grow in size depending on number of casualties.



Figure 1: Main Interface Visualization