Project Proposal (Group #1)
Group Members:

- Fabi Estrada
- Uzor Francis
- Ally Blitch
- Ivette Reese

About the Dataset:
US data file of tornado occurrences from 1950-2022 (tornados.CSV) - data of 68,693 records and 27 columns.
Our project aims to uncover patterns of tornadoes over the last seven decades. We plan to create an interactive dashboard that explores connections between states and category ratings. We'll examine trends between magnitudes and months. We chose this data because it has a wide breadth of data. Other public analysis has been done on this data, including the analysis to predict tornado magnitude by building machine learning models.
Visualizations based on questions:
1. How many tornados occurred per state?
2. Which state has the highest magnitude rating?
3. How many tornados occurred per month by state?
Our website may include three views: a bar chart showing the number of tornadoes by state, a line chart showing the number of tornadoes by magnitude per state, and a map showing the number of occurrences and magnitude of each tornado by month.
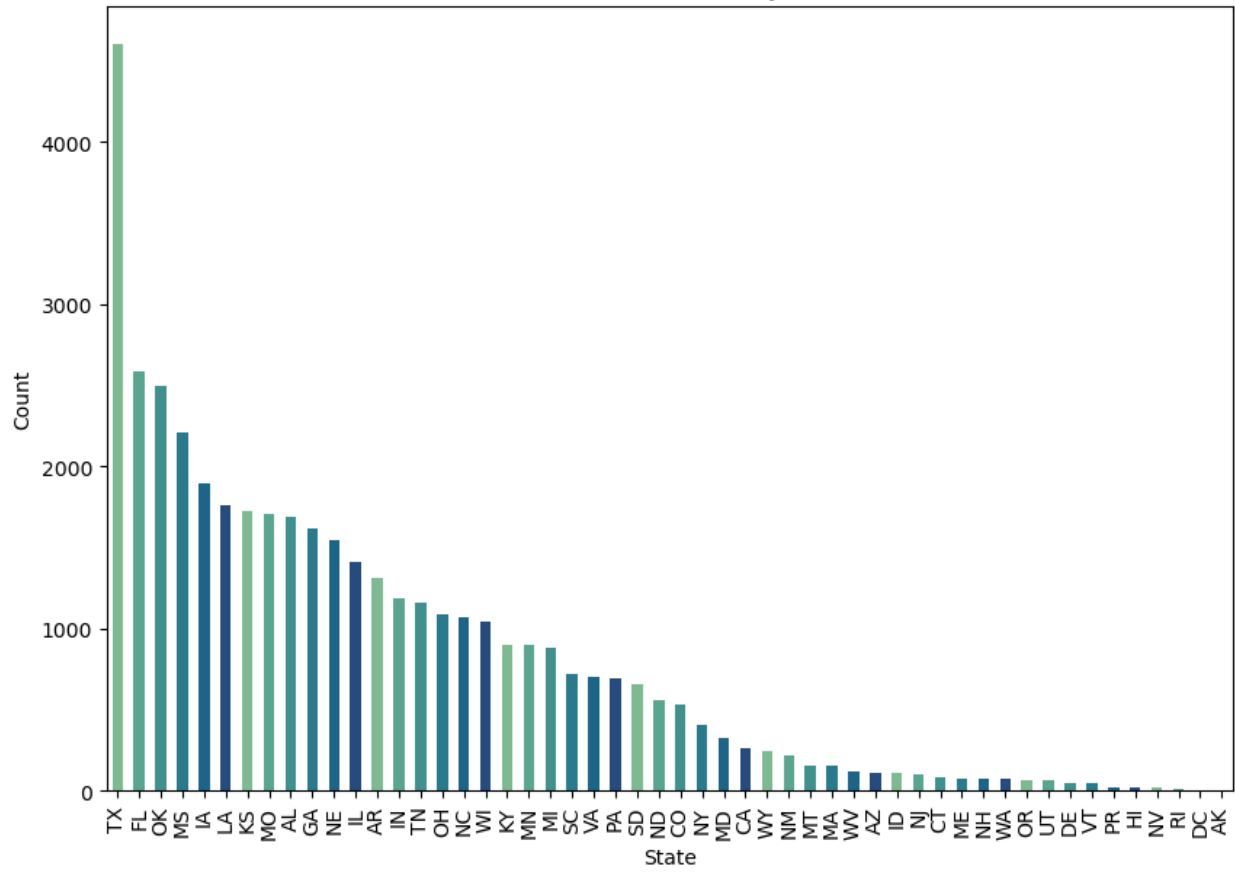We will use the Seaborn color palette: crest.
Dashboard wireframe & filters: The Dropdown will be established by month. The filters we may use are state, month, and magnitude. Once the month is selected from the Dropdown, the bar chart, line chart, and map will update.
Roles and Responsibilities:
1. Dataset acquisition as group **01/23**
2. Two Jupyter Notebooks: EDA and SQLite query as group **01/25**
3. app.py Flask routes **01/29**
4. index HTML layout + styling (styles.css) **01/30-01/31**
5. app.js views to create dashboard **01/30-01/31**
a. Bar chart
b. Line chart
c. Leaflet map
6. Slides deck
7. Written report and readme file

Number of Tornadoes by State

Tornado Magnitudes by State