# Basic Information

* **Project Title:** Examining the Consistency of UFO Sighting Reports
* **Group Members:**
  + Asa Adomatis, [asaa@clemson.edu](mailto:asaa@clemson.edu), C32722636
  + Ellie Painter, \_\_\_\_\_\_\_\_\_\_\_\_
  + Emily Wilber, \_\_\_\_\_\_\_\_\_\_
* **Repo:** <https://github.com/AsaAdomatis/CPSC-4030-Project>

# Background and Motivation

* **Motivation:** Personal interest in UFO conspiracy and recent news events about UFOs/UAPs like the military released videos and the Mexican aliens.
* **Reasoning:** See if there’s any patterns or consistencies within sightings to analyze how valid sightings are.

# Project Objectives

* **Primary Goal:** Are there consistent patterns in UFO sightings Reports?
* **Secondary Goals:**
* Is there a consistent location or set of locations UFO sightings are likely to happen at?
* Is there a consistent time where UFO sightings are likely to happen at?
* Do similar sightings have a consistent description of the encounter?

# Data

* **NUFORC Data:**
* Link: <https://www.kaggle.com/datasets/NUFORC/ufo-sightings/versions/1/data>
* Alternative: <https://data.world/timothyrenner/ufo-sightings>
* This source is up to date, but not as well cleaned.
* **Population Data for US:**
* Link: <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html>
* **Shape Files for US Counties and States:**
* Link: <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html>

# Data Processing

* **Data Clean-Up:**
* The alternate dataset (2022) needs duration data to be converted from an unformatted string to a discrete number.
* **Derived Quantities:**
* A county attribute that’s derived from long. lat. or coordinates
* A more generalized shape attribute to group things like oval, and circle together
* **Data Processing Implementation:**
* We will use Python to convert the lat. long. data into county data

# Visualization Design

* **Consistent Location 1:** Heat Map
* **Final:**
* **Type:** Geometry
* **Marks:**
* **Channels:**
* **Alternate 1:**
* **Alternate 2:**
* **Consistent Location 2:** Sightings by State
* **Option 1:**
* **Type:** Geometry
* **Items:** States
* **Attributes:** Number of Sightings
* **Marks:**
* Area – State Boundary
* **Channels:**
* Color Saturation – Number of Sights
* **Consistent Time:** Sightings by Year
* **Option 1:**
* **Type:** Table
* **Items:** Years
* **Attributes:** Number of Sightings
* **Marks:** Lines
* **Channels:**
* Length – Number of Sightings
* **Alternate 1:**
* **Alternate 2:**
* **Consistent Shape:** Sightings by Shape
* **Final:**
* **Alternate 1:**
* **Alternate 2:**

# Must-Have Features

* Filter each visualization by time frame
* Filter each visualization by shape
* Filter each visualization by state/county
* Show data in both raw form and both population adjusted form

# Optional Features

* Interact with data points on the geography and get additional description of the event
* Look at location visualization by country or by individual state

# Project Schedule

* **Week 1 (10/2):**
* Thursday: **Project Proposal**
* **Week 2 (10/9):**
* To-Do:
* Complete Website
* Create alternates for visualization and refine them from feedback
* Clean 2022 data duration times
* Derive County information from city on lat./long. coords
* Derive generalized
* **Week 3 (10/16):**
* Tuesday: Fall Break
* To-Do:
* 1 Visualization in D3js
* **Week 4 (10/23):**
* To-Do:
* 2nd& 3rd Visualization in D3js
* **Week 5 (10/30):**
* Sunday: **Project Prototype**
* To-Do:
* Final Visualization in D3js
* Hook Visualizations up to Website
* **Week 6 (11/6):**
* To-Do:
* Work on first half and a little more of visualizations for Peer Eval
* **Week 7 (11/13):**
* To-Do:
* Work on second half of visualizations
* Write Peer Eval
* Sunday: **Peer Evaluation**
* **Week 8 (11/20):**
* To-Do:
* Fix issues from Peer Evaluation
* **Week 9 (11/27):**
* To-Do:
* Fix issues from Peer Evaluation
* **Week 10 (12/4):**
* Tuesday and Thursday: **Oral Presentation**
* To-Do:
* Fix any final issues from commentary on the Oral Presentation
* **Week 11 (12/11):**
* Monday: **Final Delivery**
* Monday: **Peer Assessment**