**Storyboard Plan**

My goal is to determine what are the common differences between countries with a high WRI and low WRI.

* Who? This type of knowledge has the power to prevent undue hardship to various populations. This is also aimed at aid organizations so they may be guided where their resources may be needed the most. Another target is worldwide governments who may want to implement preventive policies against natural disasters worldwide.
* What? Analyze WRI and its associate variables to find patterns that affect the WRI score of various regions.
* When? This data covers the time span of 2011-2021.
* Where? Worldwide
* Why? This project aims to better understand the complex relationship between countries’ governments and policies with natural events to get a concept of the overall risk index score of various regions. This relationship helps organizations to understand a region’s weakness and get closer to discovering methods to prevent disaster and its outcomes.

**Slides (message and supporting visuals)**

* **Introduction**
  + **Message**
    - Overview and definition of World Risk Index and its components: Exposure and Vulnerability (includes Susceptibility, Coping and Adaption)
    - Includes the objective of the project
  + **Visuals**
    - Image of World Risk Index
    - Pie Charts showing percentages of WRI, Exposure and Vulnerability levels.
* **Latitudes**
  + **Message**
    - Latitude zones have a high correlation with WRI.
    - Information about tropical and equatorial zones
    - Hypothesis: Equatorial and Tropical Zones have the highest WRI and associated variables.
  + **Visuals**
    - Map with countries colored by zone
    - Include top layer of Exposure, Vulnerability, Susceptibility, Coping and Adaptation levels.
    - Include Median values of aforementioned variables when choosing any country.
* **Linear Relationships**
  + **Message**
    - Tropical and Equatorial zones have higher scores than other zones. Breakdown and explained for each variable
  + **Visuals**
    - Scatterplot shows the relationship between WRI, Exposure and Vulnerability levels and latitude. Also colored by zone
* **Cluster Analysis**
  + **Message**
    - Among the high WRI zones (equatorial and tropical) there are two zones.
    - Overview of some basic statistics of each zone
  + **Visuals**
    - Scatterplot of WRI vs Latitude colored by zone and clusters showing by the shape of the point.
* **Cluster Comparison**
  + **Message**
    - Differences between high WRI and low WRI tropical and equatorial regions is exposure.
    - Preventative treatments may be the best way to handle these.
  + **Visuals**
    - Boxplots showing differences between the two clusters for each variable.
    - Butterfly charts to show counts in different categories of variable scores between cluster 1 and cluster 2
* **Climate Change** 
  + **Message**
    - Climate change and how it can affect vulnerability and exposure scores.
  + **Visuals**
    - Temperature anomalies over time.
* **Conclusion**
  + **Message**
    - Case studies show that exposure is the largest differentiator between cluster 1 and cluster 2
    - Call to action is climate change
  + **Visuals**
    - Variable line plots of case study countries for comparison purposes.