Project 3 Group 1: April Gao Will Hughes Vanessa Martinez Omar Zaher

Proposal - Theme Park Accidents

Data Source

The data source for this project is a cleaned version of the Rides Database Safer Parks Data from Kaggle. We will be using a smaller sample size version of this dataset.

- Roller Coaster Accidents Kaggle https://www.kaggle.com/datasets/stevenlasch/roller-coaster-accidents?select=safer-parks-accident-dataset.csv
 - o "2017 Accident Dataset" Rides Database Safer Parks <u>Data Rides Database</u>

Motivation

Our motivation is to bring awareness to possible risks of amusement and theme park rides, and to show how many accidents have been reported over the years.

Inspiration

When brainstorming a topic we discussed that Universal Studios had recently announced that they are building a new park in Frisco, Texas. It is supposed to be a "new concept" styled theme park, geared towards families with children. With that in mind we were discussing how some theme parks can be marketed as kid friendly, but also have a variety of rides that can malfunction or cause serious harm to anyone allowed to ride them. We were curious to see if there was data regarding accidents and injuries at theme parks across the United States and make a visualization dashboard based on our findings.

Possible Research questions the dashboard can answer

What type of theme park has more reported incidents of injury or accidents? (water, amusement, etc.)

How many accidents were reported over time? Which year was the worst? What type of rides cause the most amount of injuries? (Roller coaster, water slide, train, etc.) Where are the parks with reported accidents located?

Possible Visualizations

Our dashboard will include the following visualizations:

- Barchart showing the type of theme park with reported accidents
- Donut/sunburst chart showing the breakdown of types of device category (roller coaster, waterslide, etc.)
- Scatter plot/bubble plot showing number of reported injuries over time
- Map showing location data of reported parks.

Possible Color Scheme

Our possible color scheme will include a "retro" color scheme including blues, reds, yellows, browns, and may be adjusted.

Roles/Responsibilities

Data cleaning in notebook - everyone

Website building - everyone

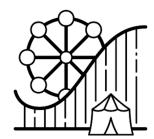
Write Up - everyone

Visualization 1- April

Visualization 2 - Will

Visualization 3 & GitHub repository management - Vanessa

Visualization 4 - Omar





(Images from Canva)