US Accidents

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Database: US Accidents (3.0 million records)

- Car accidents dataset collected countrywide from 49 states.
- Link: https://www.kaggle.com/sobhanmoosavi/us-accidents
- Size: 569 MB
- Files: 1

Known Data:

1) ID (Unique identifier)
2) Severity (Scale of 1 to 4, where 1 indicates least impact on traffic, and 4 indicates significant impact)
3) Start Time (Time of the accident in local time zone)
4) End Time (Time of the accident in the local time zone. End time refers to when the impact of the accident on traffic was dismissed)
5) Start Lat (Latitude in GPS coordinate of the starting point of the accident)
6) Start Lng (Longitude in GPS coordinate of the starting point of the accident)
7) End Lat (Latitude in GPS coordinate of the ending point of the accident)
8) End Lng (Longitude in GPS coordinate of the ending point of the accident)
9) Distance (Length of the road extent affected by the accident, in miles)
10) Description (Natural language description of the accident)
11) Street (The street name in address record)
12) City (The city in address record)
13) Timezone (Timezone based on the location of the accident)

Platform

- Web
- iOS(if we have time)

Programming Languages

- JavaScript
- HTML
- CSS
- Swift

Frameworks

- ExpressJS(REST API framework)

Feature Lists

1. Analyze accident-frequent freeways and intersections.
2. Display all accidents on map. Allow for users to restrict shown accidents via filters.
3. Display a toggleable heat map of accidents on the map.
4. A trip planner to help drivers avoid or be extra precautious at accident-frequent areas.
5. Compare weather conditions of accidents to determine the increased risk of driving at a location with inclimate weather.
6. Rank and list cities with the highest amount of accidents.