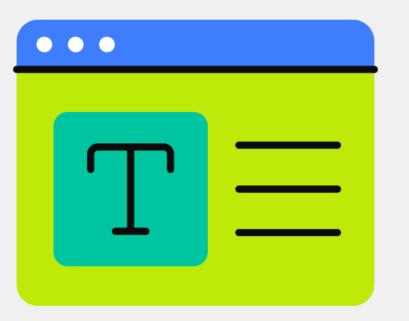
Data Annotation Plan

Rideshare Safety Data Annotation

By: Nathan Rozok



Rideshare Trust & Safety

Prioritize support tickets received by your trust and safety team

Prioritizing Safety Concern Tickets

- We endeavor to prioritize support tickets and incident reports coming in from customers of our rideshare app.
- We will start with a proof of concept by prioritizing the most important tickets that come in first - Safety Concern Tickets.

Sample Priority 1 Safety Concern

 Example → "Driver seemed distracted on a personal call and was arguing in a foreign language. Driver swerved twice during the ride due to being distracted."

Identify Relevant Features

- *Immediate Safety concerns:*
 - Driver Risky Behaviors
 - Car Safety / Mechanical Fitness for Road
 - Driver Following Relevant Traffic Laws
 - Driver Making

Feature Extraction

- Passenger Feelings of Being Unsafe and Urgency Words
- Driving Safety Related Words
- Rules of the Road Related Words
- Car Safety Related Words

Data Requirements

Internal Data

• Self Collected Data from Internal Application Database

- Our internal database contains all driver complaints for the 6 years that the application has been in existence.
 - Some of the data is labeled by the customer into categories when submitted.
 - Some of the data is labeled by internal Trust and Safety teams during review.

Sample Priority 1 Safety Concern Annotations

Sample Annotations

"Safety Concern - Driver Was Texting → My driver was texting while driving, which made me feel unsafe.

Please address this issue as it's a serious safety concern."

Class = Safety, Subclass = Distracted/Impared Driving

"Driver Sped Excessively → My driver was speeding throughout the trip, which made me very uncomfortable. Please ensure this behavior is addressed."

Class = Safety, Subclass = Reckless Driving

"Driver's Vehicle Was Smoking → The driver's car was emitting smoke during the ride, which made me very uncomfortable. I had to exit the vehicle before reaching my destination."

Class = Safety, Subclass = Vehicle Safety Issue

Instructions

- 1. Read the entire complaint to understand the complaint and get the context.
- 2. Label the Data: "Safety" on "Non-Safety" related.
- 3. For Safety Related data, Annotate the data features that indicate a safety concern.
 - a. Use context, judgement, and keywords/phrases (such as "speeding", "unsafe", "distracted", etc.)
 - b. Once annotated, apply a safety category to each annotation such as the below categories.
 - i. Reckless Driving \rightarrow speeding, running red lights, swerving, etc.
 - ii. Distracted/Impared Driving \rightarrow Driving under the influence, texting while driving, etc.
 - iii. Vehicle Safety Issue → Faulty brakes, car smoking, bald tires, etc.
 - iv. Passenger Endagerment \rightarrow Sexual harassment, threatening, etc.
 - v. Violation of Traffic Laws \rightarrow Ignoring traffic signs, etc.
 - vi. Miscellaneous \rightarrow Safety Issues that do not fit neatly into the above categories.

Part 2: Cost Considerations

Volume of Data Required

It is estimated that 15,000 samples will be required in order to get sufficient annotations of Safety related complaints.

Annotaators

The in-house Trust and Safety team will work in cahoots with the Data Science team to annotate the data.

The Data Science team has access and knowledge for using the in-house data annotation software.

Estimate Cost

Overall cost will be the workhours needed to review and annotated the data as all software and expertise are inhouse.

Cost = an estimated \$60/hr.

Hours = *125*

Total = \$7,500