PREDICTING SEVERITY OF CAR ACCIDENTS

Predicting severity of car crashes

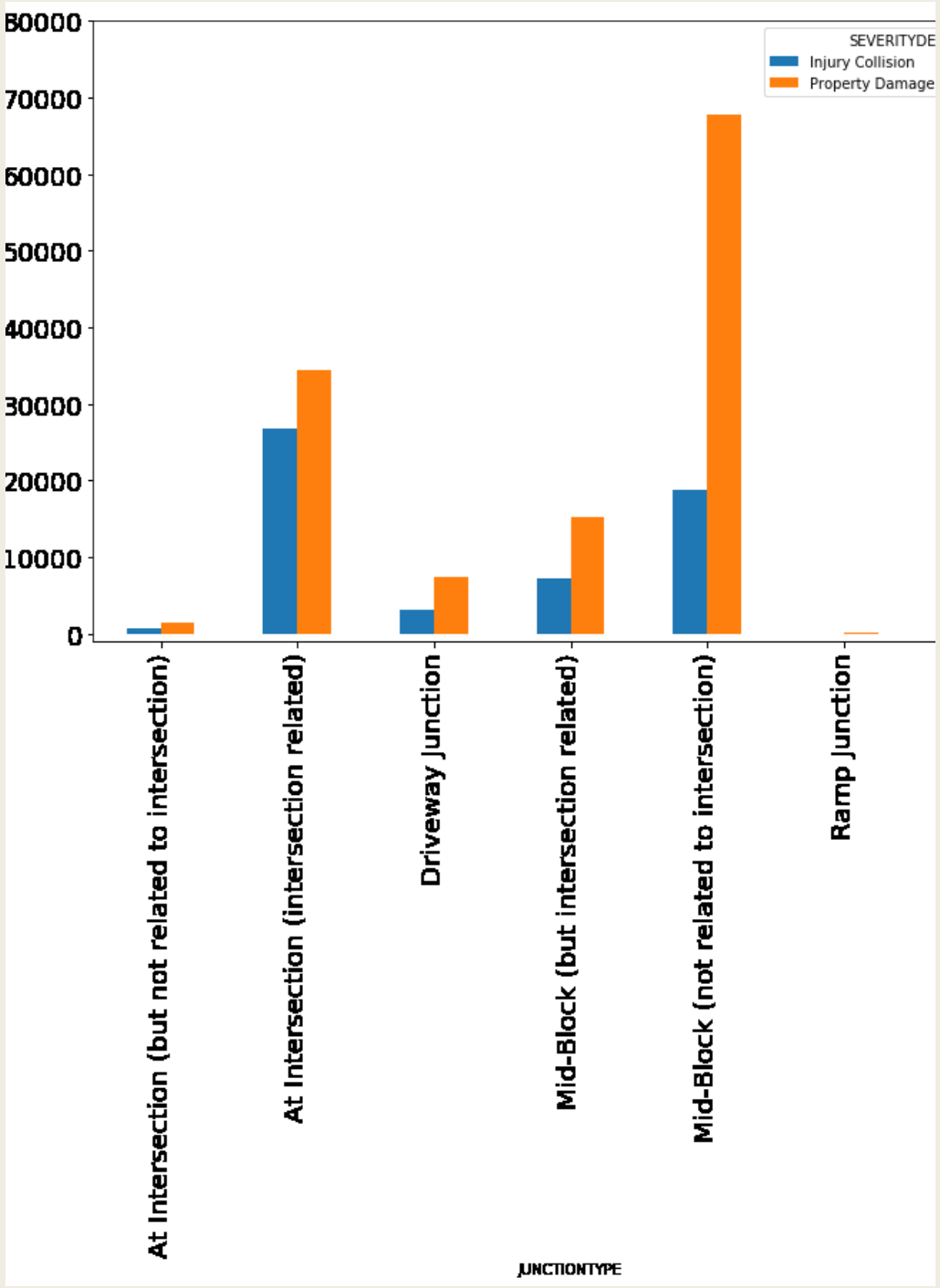
- Vehicular accidents are one of the most common causes for fatalities and injuries
- Researching whether we can predict the severity of accidents based on information such as its location, the weather, road conditions and light conditions.
- Target Audience:
  - *Seattle Government*
  - *Seattle Police*
  - *Seattle City planners*

Data Acquisition and Cleaning

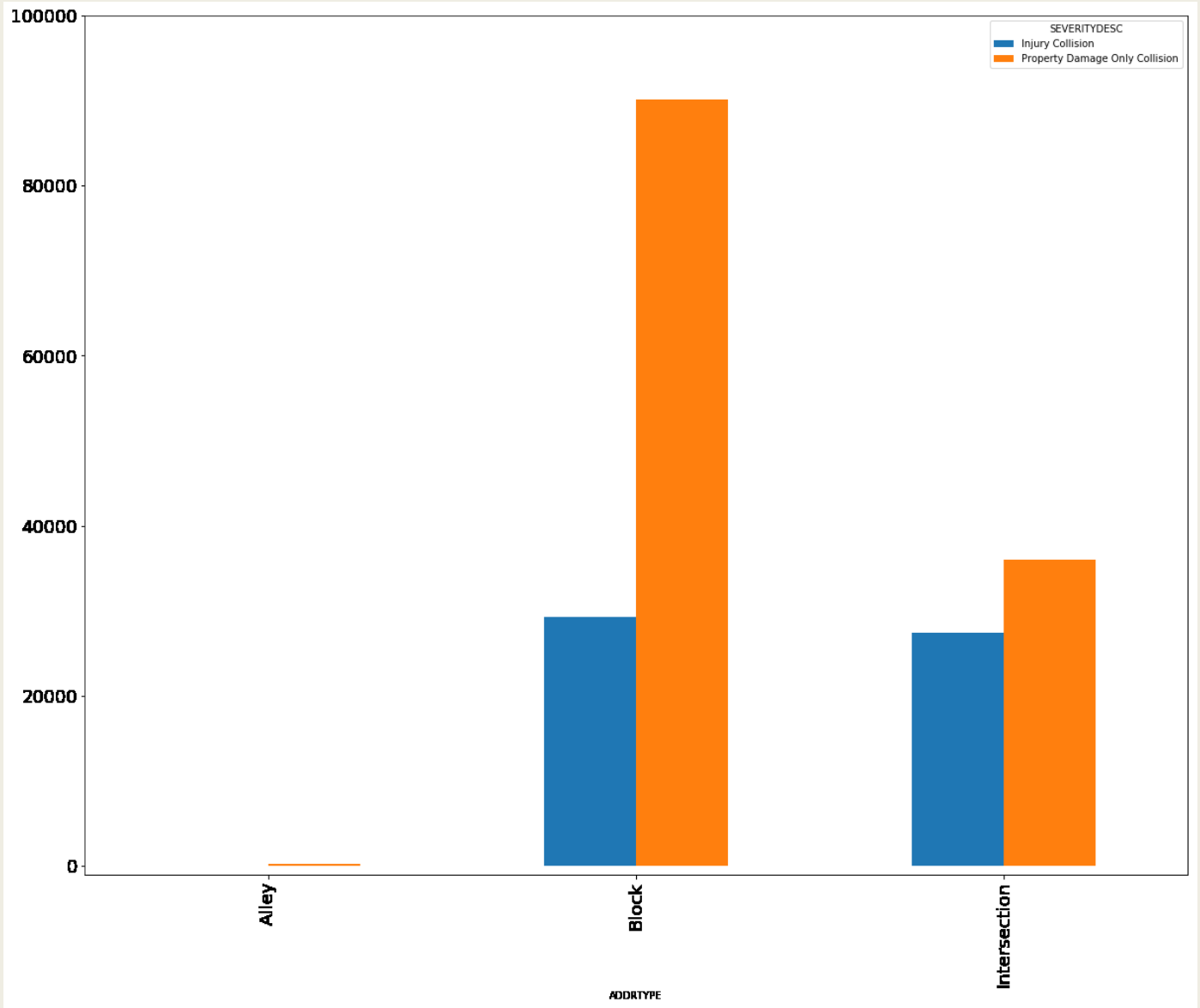
- Data provided by coursera on https://s3.us.cloud-object-storage.appdomain.cloud/cf-courses-data/CognitiveClass/DP0701EN/version-2/Data-Collisions.csv
- Dataset has information gathered on the road traffic accidents of Seattle City with 38 columns and 194673 rows.

Data Acquisition and Cleaning

- The majority of the data was not relevant to the project and was dropped
- Cleaned data contains 6 features, with SEVERITYCODE and SEVERITYDESC being the result we are trying to predict
- Only ~6% of the rows contained null values, those rows were dropped



ACCIDENT SEVERITY PER JUNCTION TYPE



ACCIDENT SEVERITY PER ADDRESS TYPE

Conclusion

- Build a decision tree to predict accident severity
- Accuracy of the model can be improved