Business Understanding:

The initial phase is to understand the project's objective from the business or application perspective. Then, you need to translate this knowledge into a machine learning problem with a preliminary plan to achieve the objectives.

Introduction/Business Problem

The project's objective is to examine the probability getting into a car accident and to predict the severity of this accident.
Especially car insurance providers and car manufacturer can profit from this application. The manufacturer would install this application in the vehicle which warns drivers about certain conditions and hazardous areas. Therefore, the driver can reconsider his plans to take a specific route, or drive at all.
The application can also provide support for the police and ambulance. If severe accidents are likely to happen on specific days, certain areas or junction types, those public institutions can plan accordingly.

Machine learning helps to assess the highest risk factors of a severe accident. Are natural circumstances (e.g. bad weather and road conditions) responsible for more severe accidents, or is it the inattention of a driver or him being under influence of drugs a greater danger?
Do severe accidents happen more often at certain junctions, or even on highways? And are the accidents more severe when pedestrians are involved? Does the severity of an accident decrease with the number of people in the car, since the driver feels a greater responsibility for all occupants?
Since we have a binary problem (Is the accident severe or not?) we can use KNN, SVM, logistic regression or a Decision Tree algorithm to predict the outcome.
With F1-Score, Jaccard index or LogLoss we can evaluate the accuracy of our model and can adapt it, by either collecting more data from other sources, or choosing different columns to train our model.
Eventually we will be able to determine the greatest influences on the severity of an accident and their correlations. The results can be then visualized in a bar graph.