**Introduction / Business Problem**

Let’s suppose that we are driving and in a certain moment we observe some traffic congestion and, when we approach the area, we realise that it has been caused by a car accident. The accident might have different degrees of severity, from relatively small consequences (e.g. small harm to third parties or to third party property) to fatal consequences (deaths). This, among others, could depend on certain environmental factors (light condition, weather condition, road condition, etc.), in such a way that if those factors are known, it might be possible to have a hint on what could be the potential (most probable) consequences of an accident under these circumstances.

To summarize, we would like to know if it is possible to predict the severity degree of a car accident depending on different parameters of the environment, and build a model that is able to perform this prediction and with which degree of accuracy.

The results of this model might be used to implement different preventive measures to reduce the risk of an accident with high severity. For example, city authorities could reduce speed limits, launch warnings to the drivers encouraging them to increase precaution, increase the number of emergency resources (firemen, ambulances, police) on alert condition or even apply a different traffic lights pattern.