**CLAIM:**

**We Claim:**

1. A Method to Detect Severity of Accident comprising:

Collecting the data from the user on the parameters such as weather information, type of vehicle, year of accident, road type, number of vehicles collided, road conditions, and various other parameters;

The data is then converted into numerical data using label encoding and given as an input to the model, that we have already trained using the dataset from United Kingdom official website of road transportation.

The model is specifically trained with the dataset for maximum accuracy and other performance metrics such as F1 score, recall and precision.

The model then predicts the accident severity based on the parameters and gives us an output as severe, slight or fatal.

This is useful for predicting the parameters which are in a combination responsible for the occurrence of the accident severity.

1. The method of claim 1, wherein supervised machine learning models are trained using labeled datasets of accident data.
2. The method of claim 1, wherein the correlation between the dependent features and independent features is identified, and we can find out the conditions on which the maximum number of accidents occur, that helps in categorizing the features which directly lead to the accident severity and indirectly affects the accident severity.
3. The method of claim 1, we also created a visualization of the data, that helps in analyzing the various patterns and features majorly contributing to the accident severity based on the year of the occurrence of the accident.