Final Project FDS

SAPIENZA
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Task and motivation

- Classify the effects on the traffic of an accident on a scale {1, 2, 3, 4}
- Could be useful to take actions to regulate the traffic when an accident occurs

Models and tools

We would like to:

- Implement our solution from scratch
- Use pandas library to process the features
- Use scikit-learn for the machine learning tools

In particular, we would like to test the following models:

- Logistic regression
- Naive Bayes
- SVM
- Neural Networks

Analysis

- We are going to use a Kaggle dataset about US accidents with about 3.5 million records and 50 features (road features, weather infos, GPS position, time) to fit the models https://www.kaggle.com/sobhanmoosavi/us-accidents

- We are going to compute the following metrics:
  - Accuracy
  - Precision
  - Recall
  - F1-score
  - PR Curve