Fraud Detection in credit cards transactions using python

1. What is the project about, and the domain:

About: Detection of fraud to ensure that customers are not charged for items not purchased. The supervised dataset has transactions between people and whether they are fraud or not. In this project classification models will be applied to classify and differentiate transactions which are fraud.

Domain: Machine learning

2. Libraries used: pandas, numpy, matplotlib, itertools, sklearn, xgboost

3. Brief walk-through of how you are going to implement things
   1. The packages will be imported in python environment
   2. The data from open source site will be imported
   3. The data will be processed and exploratory data analysis will be carried out
   4. The feature selection will be carried out and data will be splitted into training and testing data
   5. In this case 6 types of classification models will be applied
   6. The evaluation of the classification model will be done using metrics.

4. Small rough timeline for 2 weeks
14th-20th June'21:- exploratory data analysis and feature selection
21st-27th Jun'21:- Data processing and applying classification models
28th Jun'21 - 2nd Jul'21:- Evaluation of classification models applied, report

5. What other things you need to learn that weren't a part of our course
Machine learning algorithms

6. Why this project / Motivation
Understand the basic machine learning models deeply and apply the python learning.

7. References
The dataset from Machine Learning Group (http://mlg.ulb.ac.be) of ULB (Université Libre de Bruxelles) on big data mining and fraud detection.