Telecommunication Customer Churn

It is an important objective of all mobile operators to Increase and maintain the Telecommunication customers. In order to do that one of the sub-objectives is to reduce customer churn. A telecommunication customer churn refers to when a mobile subscriber ends the use of a mobile number from a given telecommunication company. A mobile subscriber is considered a churn if a particular amount of time has elapsed since the mobile user last connection over lines of this operator. A churning customer represents both loss in the revenue and an increase in the cost of marketing to replace the leaving mobile subscriber.

Churn prediction aims at building a model that identifies the precise customer behaviors and attributes which signal the risk (probability) of a customer churn. The objective is to input these parameters to a model and use the model to provide an output that defines the possibility of a customer churn. This information is then used by the marketing team in order to apply marketing techniques and offers that may cause the mobile subscriber to maintain his subscription at a given operator.

This course project aims at building a churn prediction model. In order to do that the following file of mobile subscriber users will be used. The file provides information about 90000 subscribers. Each subscriber is characterized by 100 fields. These fields include a field that defines if the customer has churned or not. Below are the rules for this project:

1- The data set for this project can be found at

   https://www.kaggle.com/abhinav89/telecom-customer?select=Telecom_customer+churn.csv

2- The project will be in groups of 4 students. Please use the following form to send your group members
   https://docs.google.com/forms/d/e/1FAIpQLScWZ98a_pNFmP09B7LsI88wLJOzbu61ubdEf-jC-C-P07-Wcg/viewform?usp=sf_link

3- The project will be done using Python and will mainly use the following Pandas, numpy and matplotlib python tools.
4- The project will consist of a number of assignments that would be evaluated by the course instructor