**[Predicting Churn for Bank Customers](https://www.kaggle.com/manishkr19/bank-customer-churn-analysis/data)**

**BY**

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**Problem Description**

Preventing bank customer churn is one of the most important things that the bank must take care to solve. By building a model to predict which customers may close their accounts using various machine learning algorithms, we can ideally nip the problem of unsatisfied customers in the bud.

**Data Description**

The data that will be used in this project has been taken from kaggle website (https://www.kaggle.com). It includes data such as: (CustomerId, CreditScore, Gender, etc.) for each bank customer. It includes 13 features, and below is the description of each one:

|  |  |
| --- | --- |
| **Features** | **Description** |
| CustomerId | Customer Identifier |
| Surname | Customer last name |
| CreditScore | The range of credit score is (350 - 850) |
| Geography | Contain three countries: French, Spain and Germany |
| Gender | Female or Male |
| Age | The customer age |
| Tenure | The period the customer spends with the bank |
| Balance | Available money in the customer's account |
| NumOfProducts | The products that the customer used in the bank |
| HasCrCard | Is the customer having credit card or not (1 ==> has a credit ,0 ==> has not) |
| IsActiveMember | Is the customer an active person or not (1 if the customer active, 0 if not) |
| EstimatedSalary | The amount of salary that the client receives |
| Exited | When customer has churned the account, it represents as 1 and 0 otherwise. |

**Tools**

* Technologies: Python, Jupyter notebook.
* Libraries: NumPy, Pandas, Matplotlib, Seaborn, Sklearn.