This description is used for two datasets: *BankChurnerTrainSet.csv* and *BankChurnerTestSet.csv*. The two datasets in total consist of nearly 10000 customers records that include age, salary, credit card limit, credit card category, etc. There are 21 columns.

Columns:

**CLIENTNUM**: Client number. Unique identifier for the customer holding the account

**Customer\_Age**: Demographic variable - Customer's age in years

**Gender**: Demographic variable - M=Male, F=Female

**Dependent\_count**: Demographic variable - Number of dependents

**Education\_Level**: Demographic variable - Educational qualification of the account holder (example: high school, college graduate, etc.)

**Marital\_Status**: Demographic variable - Married, Single, Unknown

**Income\_Category**: Demographic variable - Annual Income category of the account holder (< $40K, $40K - 60K, $60K - $80K, $80K-$120K, > $120K, Unknown)

**Card\_Category**: Product Variable - Type of card (Blue, Silver, Gold, Platinum)

**Months\_on\_book**: Time of relationship with the bank

**Total\_Relationship\_Count**: Total no. of products held by the customer (like credit card, checking or saving accounts, etc.)

**Months\_Inactive\_12\_mon**: No. of months inactive in the last 12 months

**Contacts\_Count\_12\_mon**: number of times the bank contacted the customer and/or viceversa.

**Credit\_Limit**: Credit limit on the credit card

**Total\_Revolving\_Bal**: Total revolving balance on the credit card (sum of the revolving balance starting from opening the credit card)

**Avg\_Open\_To\_Buy**: Open to buy credit line (Average of last 12 months)

**Total\_Amt\_Chng\_Q4\_Q1**: The change (ratio) in transaction amount (Q4 over Q1). A value of 0.6 means that the transaction amount of Q1 (the first quarter) is 0.6 times the amount of Q4 (the last quarter) last year

**Total\_Trans\_Amt**: Total transaction amount (Last 12 months)

**Total\_Trans\_Ct**: Total transaction count (Last 12 months)

**Total\_Ct\_Chng\_Q4\_Q1**: The change (ratio) in transaction count (Q4 over Q1). A value of 0.6 means that the transaction count of Q1 (the first quarter) is 0.6 times the count of Q4 (the last quarter) last year

**Avg\_Utilization\_Ratio**: average card utilization ratio

**Attrition\_Flag**: The target column. Customer have churned=*Attrited Customer*, customer stay= *Existing Customer*