

# Credit card customer data set description

This case uses the data of credit card customers in Taiwan from UCI website, which contains the demographic characteristics, credit data, historical repayment, billing and other information of customers from April 2005 to September 2005. The purpose is to make a prediction about whether the customer will default in the next month. The raw data format is `csv` and there are 25 columns:

Column name	Description of Meaning
ID	Customer ID
LIMIT_BAL	A line of credit that a bank gives to a customer, including a personal line of credit and a customer's family line of credit.
SEX	Gender of the client. Note the male as 1 and the female as 2.
EDUCATION	The client's level of education. Graduate and above is listed as 1, college is listed as 2, high school is listed as 3, other is listed as 4.
MARRIAGE	The client's marital status. Married as 1, unmarried as 2, other as 3.
AGE	The age of the client.
PAY_1 to PAY_6	The six variables are monthly payments from April to September 2005
BILL_AMT1 ~ BILL_AMT6	The six variables are the monthly billing records, that is, the monthly credit card purchases, from April to September 2005.
PAY_AMT1 ~ PAY_AMT6	The six variables are monthly payment records from April to September 2005, including the amount of bills paid back and the amount deposited to the credit card.
default.payment.next.month	Default or not in the next month, default is recorded as 1, no default is recorded as 0

## Additional notes:

PAY\_1 ~ PAY\_6: Repayment from September 2005 to April 2005

PAY\_1 indicates the repayment status from September 2005; PAY\_2 is the repayment in August 2005; ... ; PAY\_6 is repayment as of April 2005. The same is true for the meaning of the numeric identifiers in BILL\_AMT1 to BILL\_AMT6 and PAY\_AMT1 to PAY\_AMT6.

The values of PAY\_1 to PAY\_6 are as follows:

-2 = two months in advance; -1 = one month in advance; 0 = timely return; 1 = one month late; 2 = two months late; 3 = three months late; ... ; 9 = repayment delays of nine months or more.

The monthly payment amount `PAY_AMT` cannot fall below the bank's minimum payment for the month, otherwise it is a default. If the payment amount `PAY_AMT` is greater than the bill amount of last month `BILL_AMT`, it will be regarded as timely repayment, and the remaining amount will be deposited in the credit card for next consumption; If the payment amount is less than the previous month's bill amount but higher than the minimum payment amount, it is considered as late payment.