

## Credit Card Dataset

In order to provide loans to customers, a bank needs to make right decision in determining who should get the approval and who should not. This dataset is the German Credit Data that contains 20 attributes and the class attribute showing a good or a bad credit risk. Your team of data scientists will need to develop a data analytics based strategy for the bank managers that can help them in making a decision about loan approval for the prospective applicants.

**1. Creditability: The class attribute (qualitative) showing whether the credit rating is good or bad.**

2. Account Balance: Checking account status (1: < 0 DM, 2: 0<=...<200 DM, 3: > 200 DM, 4: No

checking account), where DM= Deutsche Mark (qualitative attribute).

3. Duration of Credit (month): Duration of credit in months (numerical)

4. Payment Status of Previous Credit: Credit history (qualitative) 0: no credits taken, 1: all

credits at this bank paid back duly, 2: existing credits paid back duly till now, 3: delay in paying off in the past, 4: critical account.

5. Purpose: Qualitative attribute showing the purpose of the loan (0: New car, 1: Used car, 2:

Furniture/Equipment, 3: Radio/Television, 4: Domestic Appliances, 5: Repairs, 6: Education, 7:

Vacation, 8: Retraining, 9: Business, 10: Others)

6. Credit Amount: Numerical value showing the credit amount

7. Value Savings/Stocks: Qualitative attribute showing average balance in savings and stocks (1 : <100 DM, 2: 100<= ... < 500 DM, 3 : 500<= ... < 1000 DM, 4 : =>1000 DM, 5: unknown/ no savings account)

8. Length of current employment: Qualitative attribute showing length of employment (1 : unemployed, 2: < 1 year, 3: 1<=...<4 years, 4: 4<=...<7 years, 5:>=7years).

9. Instalment percent: Installment rate in percentage of disposable income (numerical)

10. Sex & Marital Status: Qualitative attribute showing gender and marital status (1: male :

divorced/separated, 2: female : divorced/separated/married, 3 : male: single, 4: male : married/widowed, 5 : female : single)

11. Guarantors: (Qualitative) Guarantors and co-applicants: (1 : none, 2 : co-applicant, 3 : guarantor)

12. Duration in Current address: Qualitative value showing the duration in current address (1: <= 1 year, 1<...<=2 years, 2<...<=3 years, 3:>4years)

13. Most valuable available asset: Qualitative attribute showing valuable assets ( 1 : real estate

2 : savings agreement/ life insurance, 3 : car or other, 4 : unknown / no property)

14. Age (years): Numerical value showing age in years.

15. Concurrent Credits: Installment plans ( 1 : bank, 2 : stores, 3 : none )

16. Type of apartment: Type of housing ( 1 : rent, 2 : own, 3 : for free)

17. No of Credits at this Bank: Numerical value showing number of existing credits at the bank
18. Occupation: Job (Qualitative) (1 : unemployed/ unskilled - non-resident, 2 : unskilled - resident, 3 : skilled employee / official, 4 : management/ self-employed/highly qualified employee/ officer)
19. No of dependents: Numerical value showing number of dependents
20. Telephone: Qualitative attribute for telephone number (1: yes, 2: No)
21. Foreign Worker: Qualitative attribute showing whether the person is the foreign worker or not (1: yes , 2: no)