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Project Proposal

Background:

The goal of this project is to use predictive analysis to determine customers of the bank who are most likely to churn (close their bank account).

Data Description:

The dataset contains some customers who are withdrawing their account from the bank due to some loss and other issues.

Sample size is 10000 customers data of a bank.

The dataset has 10000 rows and 14 columns.

Column names are:

- **RowNumber:** Specifies the row number.
- **CustomerId:** Identity number of the customer.
- **Surname:** The last name of the customer.
- **CreditScore:** The range of credit score is from 350 to 850.
- **Geography:** Country or region, the regional bank has customers from three countries: France, Germany and Spain.
- **Gender:** Male or female.
- **Age:** Customer age.
- **Tenure:** Years that the customer has stayed with the bank.
- **Balance:** The amount of money available for withdrawal.
- **NumOfProducts:** The number of products that the customers use in the bank.
- **HasCrCard:** Whether the customer has credit card or not. 1 indicates yes.
- **IsActiveMember:** Whether the customer is an active member or not. 1 indicates is active.
- **EstimatedSalary:** Customer's self-reported annual salary.
- **Exited:** Whether the customer has churned (closed the bank account), 1 indicates churn.

Tools:

- Technologies: Python, Jupyter notebook.
- Libraries: Numpy, Pandas, Pandas profiling, Matplotlib, Seaborn, Sklearn.