

Summary/Synopsis: The "Bank Credit Card Churn" project used a dataset of 10,000 customers with 18 features sourced from Kaggle to identify customers at risk of churning. Python code was employed to clean and preprocess the data, generate exploratory visualizations, and build predictive models. A Gradient Boosting Classifier initially showed suspiciously perfect results due to over-reliance on a single feature, so I proceeded with a logistic regression model. This model achieved an accuracy of 87.17%, effectively identifying non-churn cases but requiring further refinement for better churn prediction. Feature importance analysis highlighted key factors influencing churn, such as the number of customer contacts and months of inactivity. The project underscored the potential and challenges in using machine learning for churn prediction, suggesting further model testing and data balancing to enhance performance.