Credit Card Approval using Machine Learning

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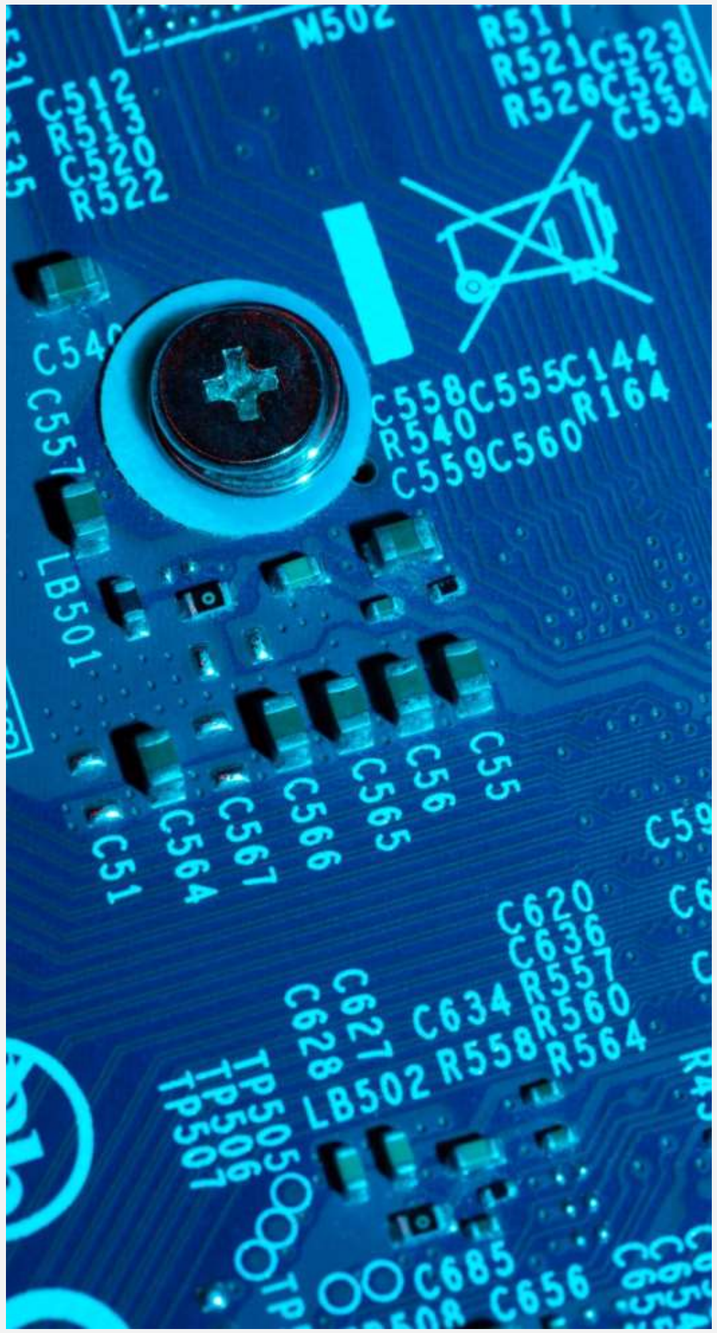
Team 4



Introduction to Credit Card Approval using ML

Credit card approval using Machine Learning (ML)automates the process of evaluating applicants based on their financial history, income, employment status, and other factors.

ML models analyze historical data to predict whether an applicant is likely to default, enabling faster, more accurate, and fairer decisions.

Technologies used

Language: Python
Frameworks/Libraries: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn
Dataset: Datasets from Kaggle
Machine Learning Models: Logistic Regression, Decision Trees, Random Forest, Gradient Boosting, and XGBoost
Tools: Jupyter Notebook, Google Colab, PyCharm

Benefits of Credit Card Approval using ML

Automation: Speeds up the approval process.
Accuracy: Identifies complex patterns for better predictions.
Scalability: Handles large volumes of applications.
Fairness: Reduces bias in decision-making.

Challenges

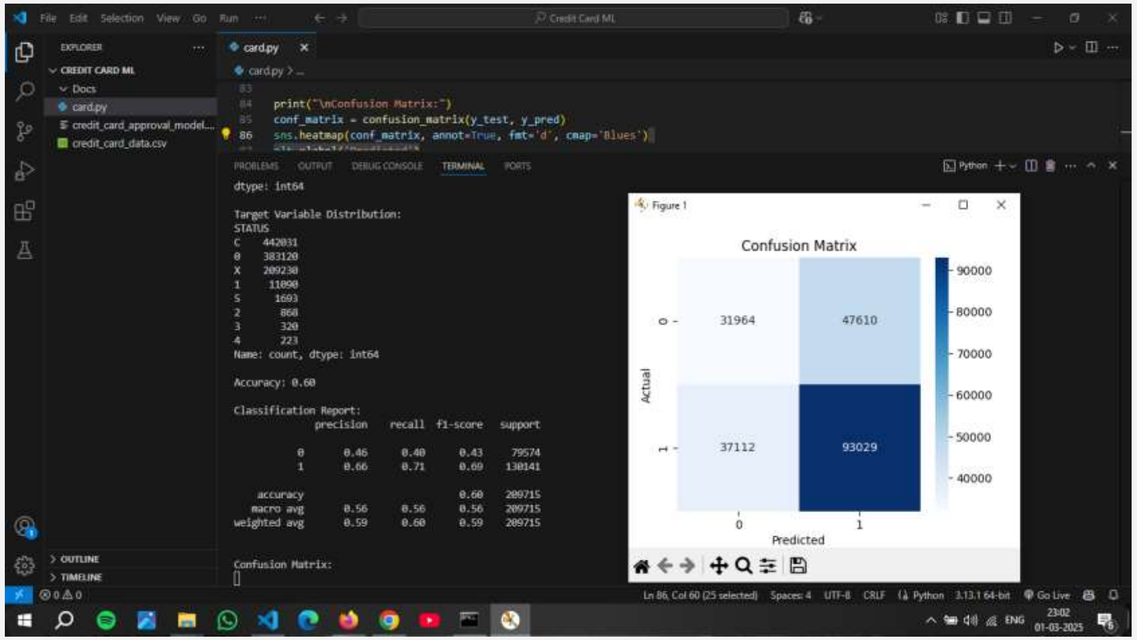
Imbalanced Data: More approvals than rejections (use SMOTE).
Bias: Ensure fairness in predictions.
Interpretability: Explain why applications are approved/rejected.

Applications

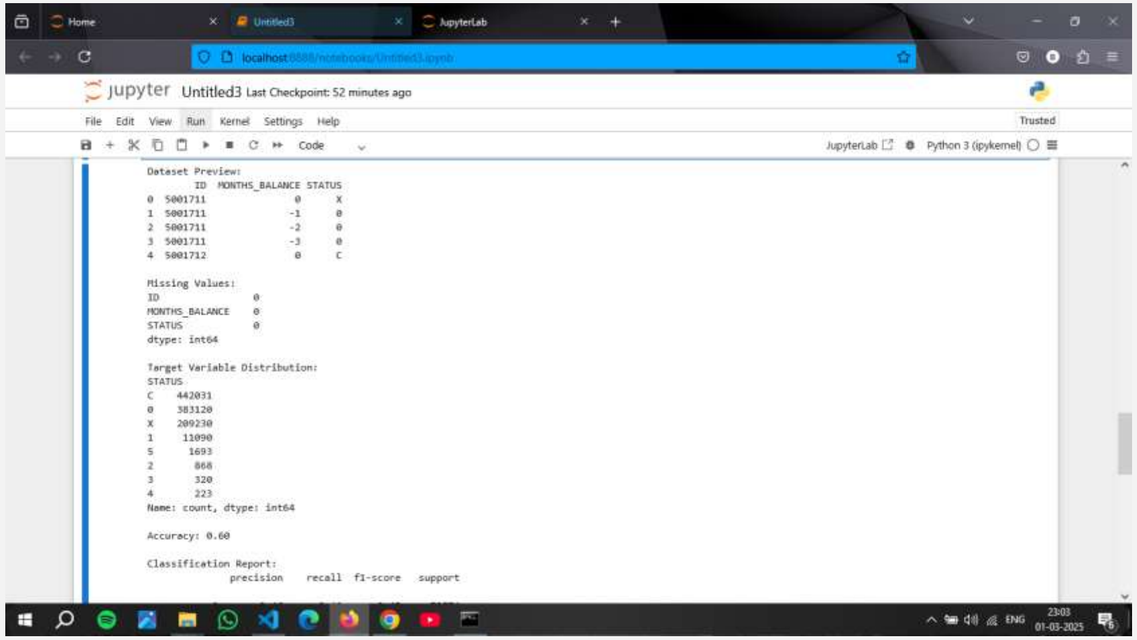
Banks, Fintech companies, Credit scoring agencies use ML for faster, Smarter credit card approval

Output

Graph View on VS Code



Datasets on Jupyter Notebook



Thanks!