

Proposal for Project 4 Capstone

Our goal is to analyze credit card data, loan approval data, and determine whether someone's credit application or loan application is approved.

Sajid Anjum Raymond Bell Han Le April Gao
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1. Data source

<https://www.kaggle.com/datasets/samuelcortinhas/credit-card-classification-clean-data>

<https://www.kaggle.com/datasets/arbazkhan971/loan-approval-analysis>

2. Motivation

Money and loans are very important to a functioning economy, and we would like to see that everybody has access to loans.

3. Website

- Create a form that inputs data to predict whether loan application is approved
- Create a dashboard to see the relationships between various variables such as education/housing/income and whether an application is approved

4. Research Questions

- What are the most important variables to getting a loan application approved?
- If the most important variables are removed, what is the relationship between the next most important factors?
- Is the process fair?

5. Predictions

- Income will be the most important factor
- Other factors such as education, housing, and family will play a role

6. Colors

- Simple, clear, clean, and somber colors to represent our topic

7. Roles

- Raymond: Tableau dashboard 1
- Han: Tableau dashboard 2
- April: Machine Learning Tree/Classifier Models
- Sajid: Machine Learning Neural networks
- Everybody: Website

Tableau public links:

<https://public.tableau.com/app/profile/caesarmario/viz/CreditCardApplicantDashboard/ApplicantDashboard>

<https://public.tableau.com/app/profile/mehmet.su/viz/CreditCardApproval/CCApproval>