

Proposal for Project 4 Capstone

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

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

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

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>