**Loan Data Set – Lending Club**

Lending Club is a peer-to-peer loan company. Lending Club provides personal and commercials loans to borrowers, which are then backed by investors in the loans. The peer-to-peer model allows for lower interest-rates to borrowers and for investors to earn money on the interest paid back to them.

**Operations**

Over 80% of the loans provided by Lending Club are personal. These loans are mostly made by borrowers in order to consolidate debt or pay off credit cards, but they may be provided for numerous reasons such as weddings, vacations, and for small businesses.

**Geographic Reach**

California-based Lending Club operates its business throughout North America.

**Strategy**

Personal Loans are tied to the economy – When the economy is good, people are more confident, willing to purchase on credit, and capable of paying back what they borrowed. Over the past two years, Lending Club has provided over 3 billion dollars in loans. The company provides personal loans for amounts between $1,000 and $40,000 that can be repaid over time periods of 3 or 5 years. Lending Club approves loans based on credit history, credit score, debt to income ratio (dti), and the amount of the loan applied for. Lending Club is highly selective with the loans it accepts, with over an 80% denial rate over the past four years. This ensures that Lending Club provides high quality opportunities for itself and for lenders.

After some negative publicity at the board level, Lending Club is looking to refocus its efforts on providing high quality loans. They are looking to improve the company’s ability to predict borrowers who will default on loans. Additionally, Lending Club is interested in predicting how much a borrower would be able to pay back, regardless of how large of a loan they have applied for.

**Competitors**

Marcus by Goldman Sachs, Citizens One, OneMain, Prosper, Avant, Upstart, Circleback Lending

**The Data**

**Here is a summary of the data:**

Data Original columns (total 54 columns):

* member\_id - 50000 non-null int64 - *A unique Lending Club assigned Id for the borrower member.*
* loan\_amnt - 50000 non-null int64 - *The listed amount of the loan applied for by the borrower. If at some point in time, the credit department reduces the loan amount, then it will be reflected in this value.*
* funded\_amnt - 50000 non-null int64 - *The total amount committed to that loan at that point in time.*
* funded\_amnt\_inv - 50000 non-null float64 - *The total amount committed by investors for that loan at that point in time.*
* term - 50000 non-null float64 - *The number of payments on the loan. Values are in months and can be either 36 or 60.*
* int\_rate - 50000 non-null float64 - *Interest Rate on the loan*
* installment - 50000 non-null float64 - *The monthly payment owed by the borrower if the loan originates.*
* sub\_grade - 50000 non-null object - *Lending Club assigned loan subgrade: A1, A2, A3, etc. with A1 being the best*
* grade – 50000 non-null object – *Lending Club assign loan grade: A, B, C, D, etc. with A being the best*
* risk\_factor – 50000 non-null int32 – *Associated risk factor for loan. Based on subgrade*
* emp\_title - 47169 non-null object - *The job title supplied by the Borrower when applying for the loan.*
* emp\_length - 48198 non-null float64 - *Employment length in years. Possible values are between 0 and 10 where 0 means less than one year and 10 means ten or more years.*
* home\_ownership - 50000 non-null object - *The home ownership status provided by the borrower during registration. Our values are: RENT, OWN, MORTGAGE, OTHER.*
* annual\_inc - 50000 non-null float64 - *the self-reported annual income provided by the borrower during registration.*
* total\_debt - 50000 non-null float64 - *the borrower’s total monthly debt payments, excluding mortgage and the requested Lending Club loan*
* verification\_status - 50000 non-null object - *Indicates if income was verified by Lending Club , not verified, or if the income source was verified*
* issue\_d - 50000 non-null object - *The month-year which the loan was funded*
* loan\_status - 50000 non-null object - *Current status of the loan*
* pymnt\_plan - 50000 non-null object *- Indicates if a payment plan has been put in place for the loan*
* desc - 31004 non-null object - *Loan description provided by the borrower*
* purpose - 50000 non-null object - *A category provided by the borrower for the loan request.*
* zip\_code - 50000 non-null object - *The first 3 numbers of the zip code provided by the borrower in the loan application.*
* addr\_state - 50000 non-null object - *The state provided by the borrower in the loan application*
* delinq\_2yrs - 50000 non-null int64 - *The number of 30+ days past-due incidences of delinquency in the borrower's credit file for the past 2 years*
* earliest\_cr\_line - 50000 non-null object - *The month the earliest reported credit line was opened*
* inq\_last\_6mths - 50000 non-null int64 - *The number of inquiries in past 6 months (excluding auto and mortgage inquiries)*
* mths\_since\_last\_delinq - 21874 non-null float64 - *The number of months since the borrower's last delinquency.*
* mths\_since\_last\_record - 2532 non-null float64 - *Number of months since the last public record.*
* open\_acc - 50000 non-null int64 - *The number of open credit lines in the borrower's credit file.*
* pub\_rec - 50000 non-null int64 - *Number of derogatory public records*
* revol\_bal - 50000 non-null int64 - *Total credit revolving balance*
* revol\_util - 49969 non-null object - *Revolving line utilization rate, or the amount of credit the borrower is using relative to all available revolving credit.*
* total\_acc - 50000 non-null int64 - *The total number of credit lines currently in the borrower's credit file*
* initial\_list\_status - 50000 non-null object - *The initial listing status of the loan. Possible values are – W, F*
* out\_prncp - 50000 non-null float64 - *Remaining outstanding principal for total amount funded*
* out\_prncp\_inv - 50000 non-null float64 - *Remaining outstanding principal for portion of total amount funded by investors*
* total\_pymnt - 50000 non-null float64 - *Payments received to date for total amount funded*
* total\_pymnt\_inv - 50000 non-null float64 - *Payment received to date for portion of total amount funded by investors*
* total\_rec\_prncp - 50000 non-null float64 - *Principal received to date*
* total\_rec\_int - 50000 non-null float64 - *Interest received to date*
* total\_rec\_late\_fee - 50000 non-null float64 - *Late fees received to date*
* recoveries - 50000 non-null float64 - *post charge off gross recovery*
* collection\_recovery\_fee - 50000 non-null float64 - *post charge off collection fee*
* last\_pymnt\_d - 49957 non-null object - *Last month payment was received*
* last\_pymnt\_amnt - 50000 non-null float64 - *Last total payment amount received*
* next\_pymnt\_d - 7136 non-null object - *Next scheduled payment date*
* last\_credit\_pull\_d - 50000 non-null object - *Most recent month credit was pulled for this loan*
* collections\_12\_mths\_ex\_med - 50000 non-null int64 - *Number of collections in 12 months excluding medical collections*
* mths\_since\_last\_major\_derog - 7120 non-null float64 - *Months since most recent 90-day or worse rating*
* policy\_code - 50000 non-null int64 - *publicly available = 1, not publicly available = 2*
* application\_type - 50000 non-null object - *Indicates individual or joint application*
* acc\_now\_delinq - 50000 non-null int64 - *# of accounts on which the borrower is delinquent.*
* tot\_coll\_amt - 35382 non-null float64 - *Total collection amounts ever owed*
* tot\_cur\_debt - 35382 non-null float64 - *Total current balance of all accounts*
* total\_credit\_rv - 35382 non-null float64 - *Total revolving high credit/credit limit*
* loan\_is\_bad - 50000 non-null bool - *True if Borrower defaulted on loan. False if loan was good.*