



LENDING CLUB

Case Study

Problem Statement

What is Lending Club...?

It is a consumer finance company which specializes in lending various types of loans to urban customers.







Likely to repay
the loan



Not Likely to
repay the loan

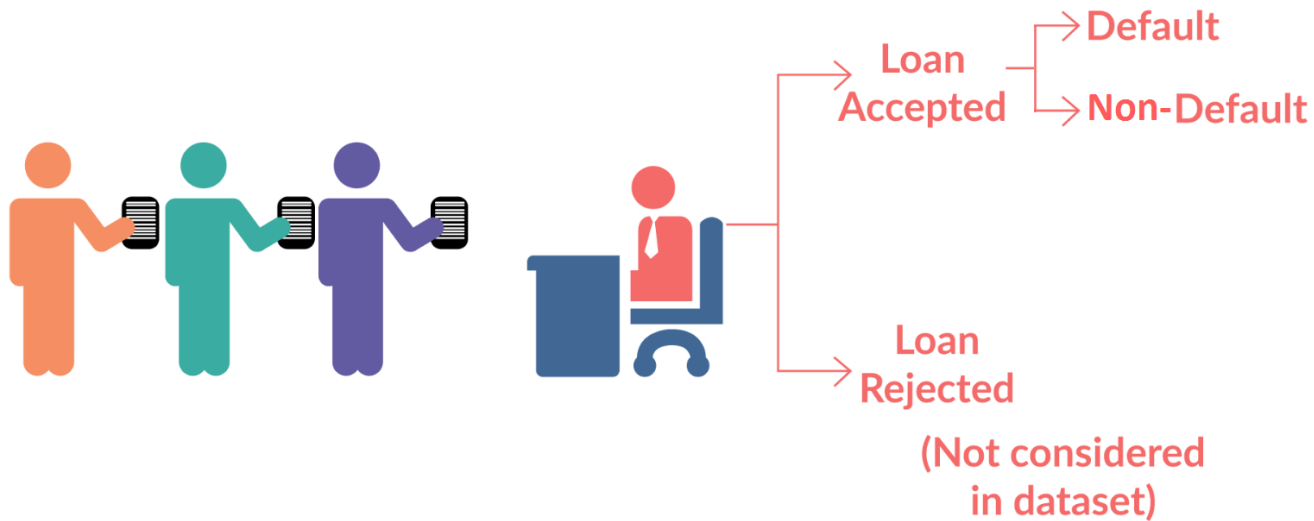
**Should company accept
the loan or not?**

Risk with Loan status

Person	Likely to repay the loan	Loan Status Accepted/Rejected	Risk with loan status
		Rejected	Loss of business
		Accepted	Financial Loss

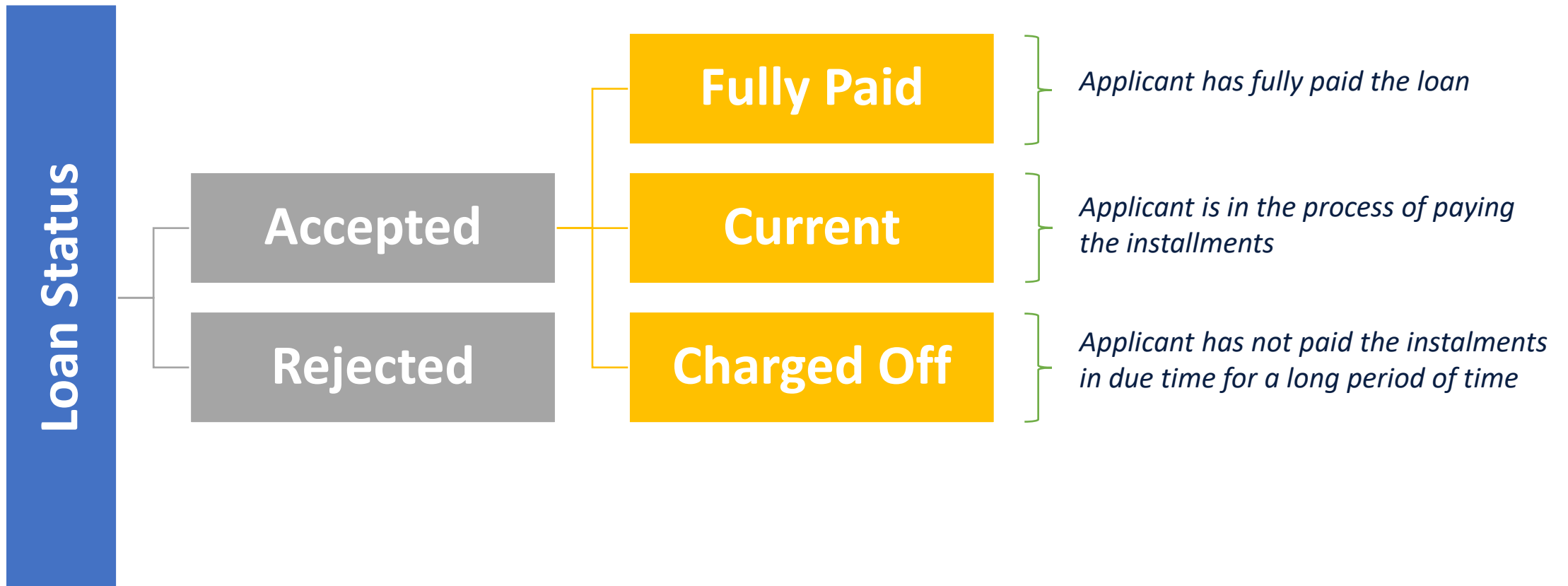
Loan Dataset

LOAN DATASET



- **Loan_amnt**
 - Amount borrowed by the customer
- **Funded_amnt**
 - Amount approved by lending club
- **Fun_amt_inv**
 - Amount funded by the investors

Loan Dataset

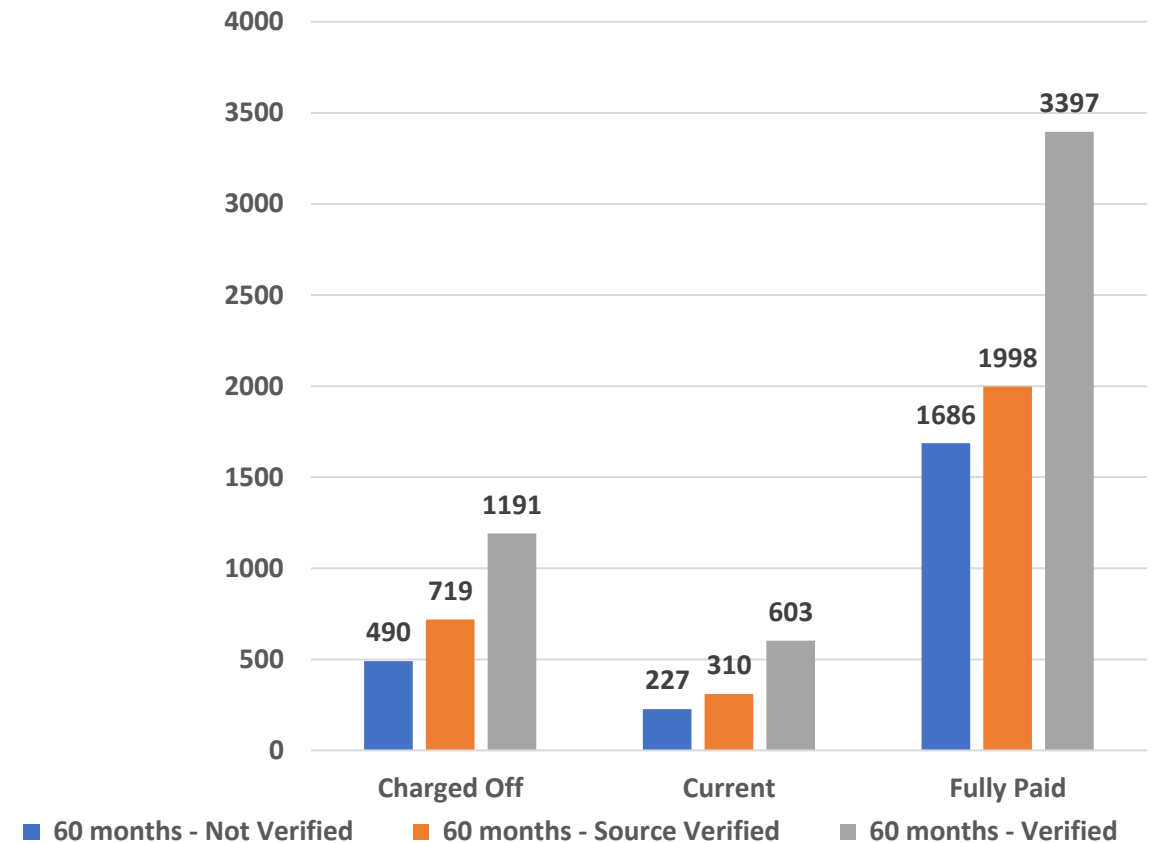
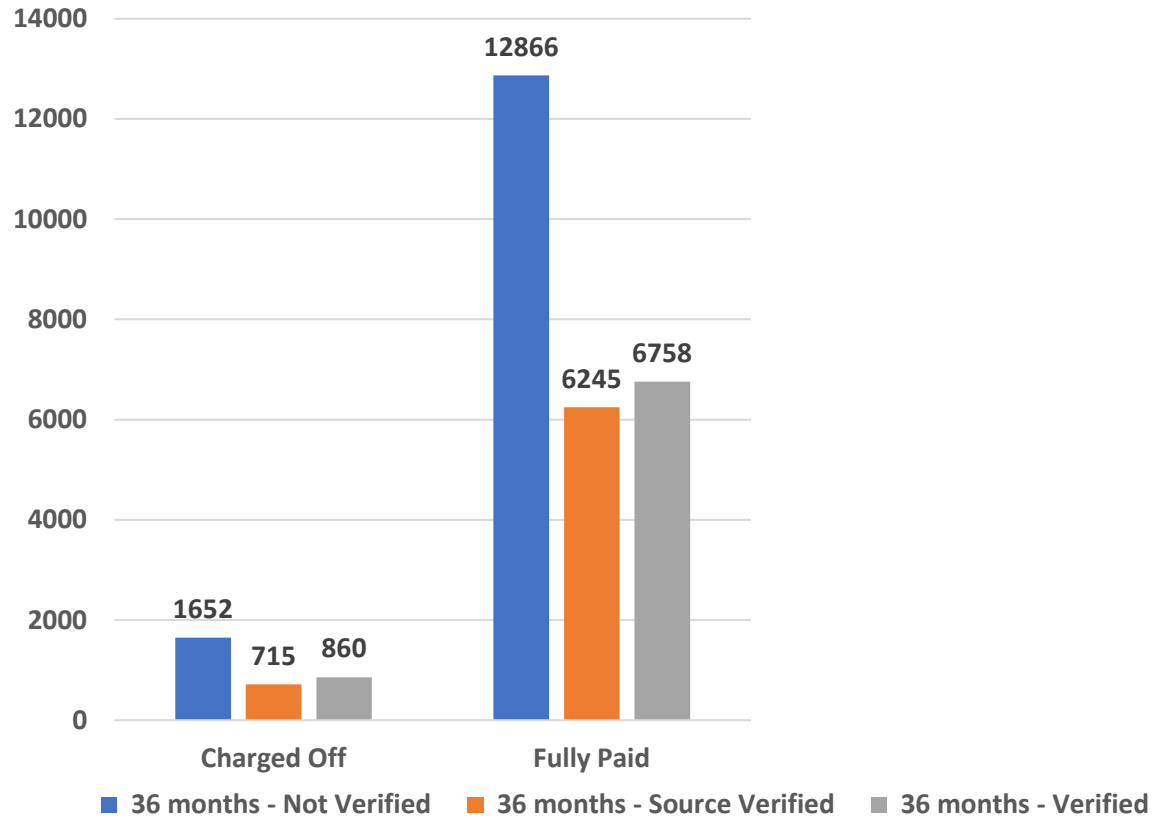


Data Analysis and Observation

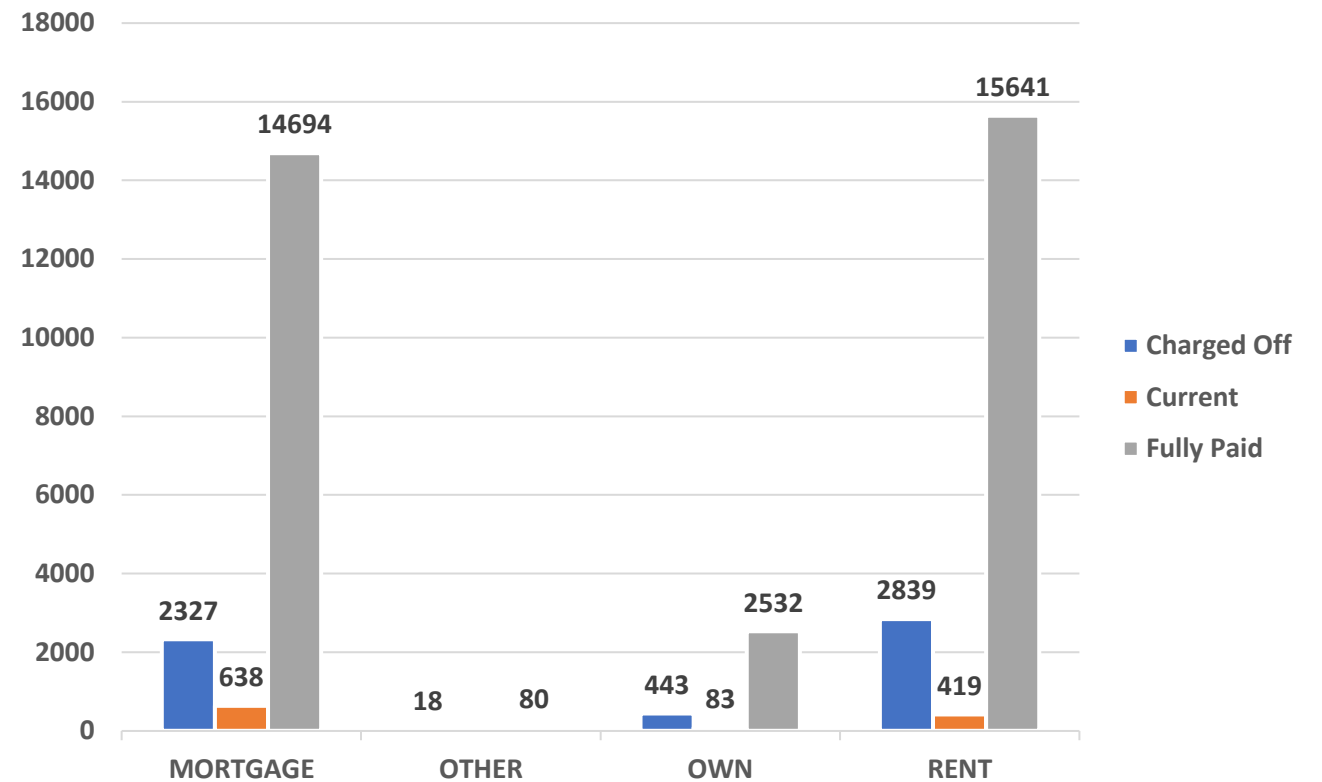
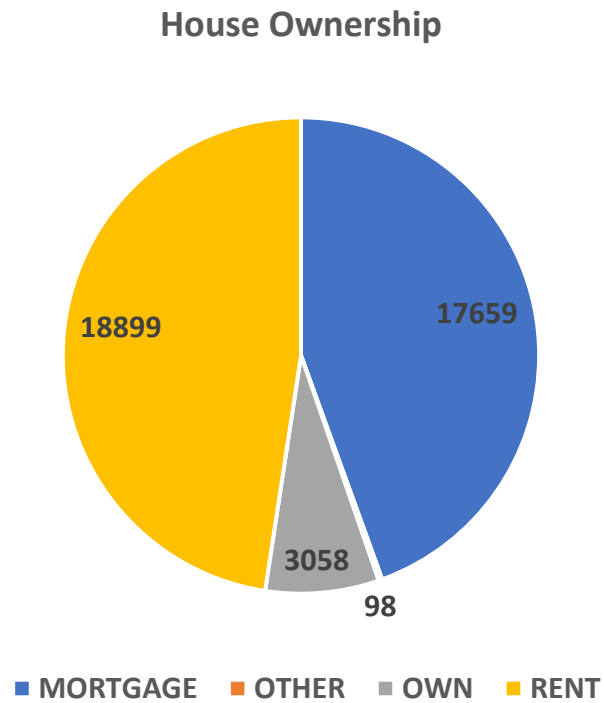


Master Observation

Total Loans	39717
Charged Off	5627
Current	1140
Fully Paid	32950



Observation with house ownership



Mortgage and Rent have taken loans for the maximum and also charged off the max.

Data Cleaning

- All the *charged off* customers can be removed from the list to avoid the risk of financial issues later by approving the loan again to them.
- We have many NaN at some columns, we can remove them if needed.
- It is observed customers whose annual income is less than 4lakhs are fully paid customers. So approving loan those candidates will reduce the risk to company.

Count of customers to whom loan can be approved after cleaning data - 34010

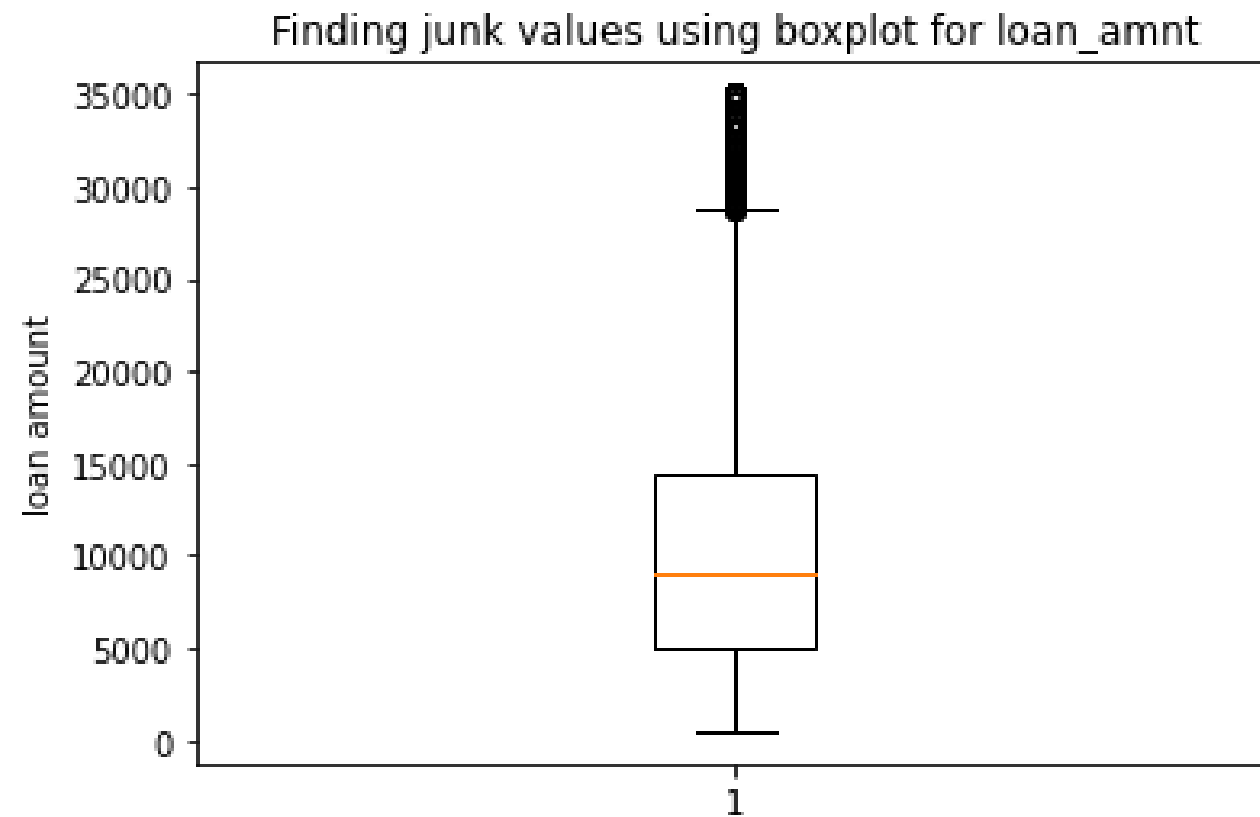


Sanity Checks

- Income per month should be more than the interest of the loan
- Total payment paid for loan should be more than the payment approved

Count of customers to whom loan can be approved after sanity check - 31674

Data Visualization



A photograph of a bright, modern dining room. In the foreground, a wooden dining table is covered with a light blue patterned tablecloth and is set with white bowls and plates. To the right of the table is a large, leafy green potted plant. In the background, a window with white shutters is open, revealing a view of greenery outside. A black pendant lamp hangs above the table. The entire image is framed by a white border.

Thank You