

Credit Card Default Prediction

made by Amrit

I NEURON

HLD Document

copyright © all rights reserved by Amrit

1.INTRODUCTION

There are times when even a seemingly manageable debt, such as credit cards, goes out of control. Loss of job, medical crisis or business failure are some of the reasons that can impact your finances. In fact, credit card debts are usually the first to get out of hand in such situations due to hefty finance charges (compounded on daily balances) and other penalties. A lot of us would be able to relate to this scenario. We may have missed credit card payments once or twice because of forgotten due dates or cash flow issues. But what happens when this continues for months? How to predict if a customer will be defaulter in next months? To reduce the risk of Banks, this model has been developed to predict customer defaulter based on demographic data like gender, age, marital status and behavioral data like last payments, past transactions etc

Just because of all the problems we as a data scientist perform a machine learning algorithm which helps to predict before, which customer is going to a defaulter in the future months according to it we can reduce the defaulter percentage on an average

2.GENERAL DESCRIPTION

As we know this is a machine learning model here we use a Dataset Information .This dataset contains information on default payments, demographic factors, credit data, history of payment, and bill statements of credit card clients in Taiwan from April 2005 to September 2005. And there are a total of 25 columns of data full of information .after a check there are no null data present in the dataset ,it means it gives an advantage to making our model

After all the collection of data we compare each single column with our target column (default)

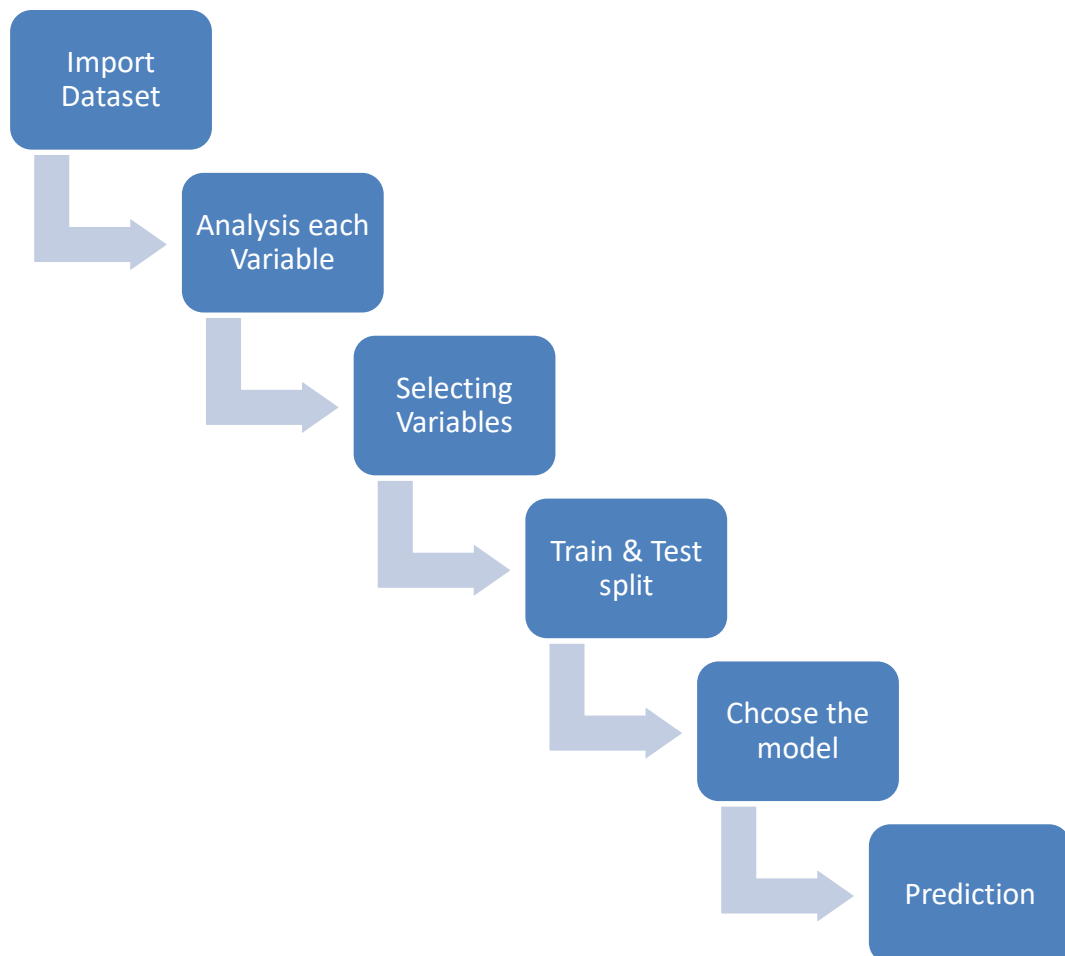
And finally we get some information as :

- more women present than men in our dataset
- comparatively, men have a slightly higher chance of default.
- There are few people on the 'unknown' categories but we change them to another category
- who are educated they are less chance to be default
- most people fall either on the 'Married' or 'Single' category who takes lone
- in between 25 and 40 years old people are low chance to be default
- the higher the limit, lower the chance of default
- all the over we see that being Female, More educated, Single and between 30-40 years old means a customer is more likely to make payments on time.

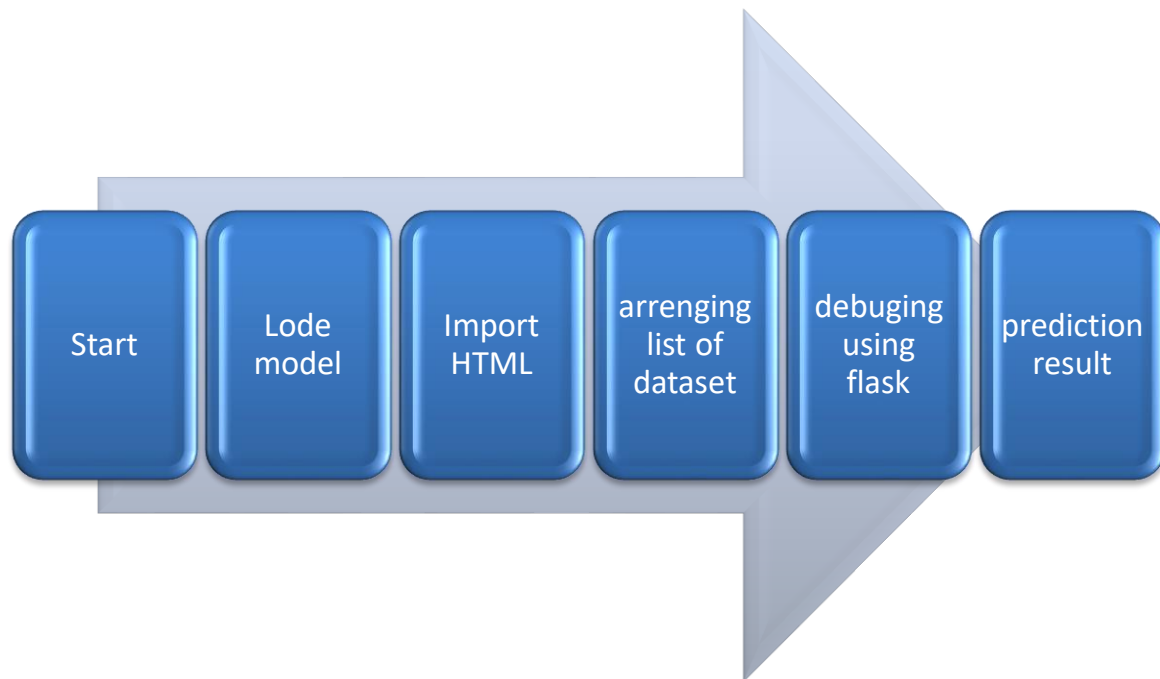
Tools Us:



DESIGN DETAILS:



Deployment process :



CONCLUSION:

The project is designed in flask; hence it is accessible to everyone. The above designing process will help banks and loan lenders predict whether customers will default the credit card payment or not, so the bank or respective departments can take necessary action, based on the model's predictions. The UI is made to be user-friendly so that the user will not need much knowledge of any tools but will just need the information for results.