

Project Design Phase-I

Date	12 October 2022
Team ID	PNT2022TMID35292
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	One of the most significant elements affecting the economy and financial health of our nation is the credit system controlled by the banks. Additionally, one of the primary roles of the banking industry is to manage credit risk. One of the challenging challenges for every bank is the forecast of loan defaulters. When banks must give loans to consumers who are in need of money, this issue arises. However, by anticipating loan defaulters, banks may be able to cut their loss by decreasing their non-profit assets.
2.	Idea / Solution description	This method makes use of machine learning techniques, which are highly important and helpful in the prediction of this kind of data. They may be utilized to do such classifications of credit defaulters. There will be usage of classification techniques including Decision Tree, Random Forest, KNN, Xgboost, and SVM. These methods are used to train and test the data, and then the best model is chosen and stored in pkl format. After that, IBM deployment and flask integration will be completed.
3.	Novelty / Uniqueness	In order to categorize the applicants with the least amount of error, the solution tries to use the best model out of the five given models.
4.	Social Impact / Customer Satisfaction	The bank personnel will use this program to properly and efficiently categorize credit defaulters. As a result, the banks' non-profit losses have decreased. As a result, they can pay back the authorized loans with little loss.

5.	Business Model (Revenue Model)	The approach is adaptable and may be used as a pay per month plan. Employees of the bank can subscribe on a monthly or annual basis. Selling the model to the bank that will pay you the amount that will make developers the most money is also an alternative.
6.	Scalability of the Solution	The application's front end is modular. To achieve this, Python Web Framework is employed. The flask integration is used on the bank end. As a result, it is simple to create new pages and integrate various functionalities.