

Project Design Phase-I
Proposed Solution Template

Date	17 October 2022
Team ID	PNT2022TMID12860
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)	The prediction of credit defaulters is one of the difficult tasks for any bank. But by forecasting the loan defaulters, the banks definitely may reduce their loss by reducing their non-profit assets, so that recovery of approved loans can take place without any loss and it can play as the contributing parameter of the bank statement. But manually assessing the credibility of applicants is a time consuming process and incorrect many a times.
2.	Idea / Solution description	A Machine learning model must be developed to predict the credit defaulters. This model must be trained on previous Loan approval data and their manual credibility checked data. This can be then used to predict the applicant's credibility automatically.
3.	Novelty / Uniqueness	In this model, the previous manually checked credibility is taken as training data. Once trained it will take Data on Loan history, Financial status and stability, Family status and Co-applicant Credibility as inputs and will provide a Boolean value output for credibility.
4.	Social Impact / Customer Satisfaction	This model mostly predicts the credibility of a loan applicant accurately, automatically in less time compared to conventional manual checking. This socially helps banks to identify credible loan applicants thus also reduces the loss factor of the Lender (usually Bank). It also speeds up the loan sanctioning process, thus helping the applicants too.
5.	Business Model (Revenue Model)	A model without human intervention reduces capital investment for the man power and it saves time consumed in this manual process. It will also be accurate than the manual credibility checking process, thus preventing money landing on fraudulent hands.
6.	Scalability of the Solution	This model can be used with any number of Loan Applicant data and the same algorithm can be used in all the banks or all lenders. With proper organisation and pre-processing of the data about the loan applicant the above proposed solution is completely scalable.