

**PROJECT DESIGN PHASE - I**  
**PROPOSED SOLUTION TEMPLATE**

DATE	06 October 2022
TEAM ID	PNT2022TMID28895
PROJECT TITLE	Smart Lender - Applicant Credibility Prediction for Loan Approval
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**Smart Lender - Applicant Credibility Prediction for Loan Approval**

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**INTRODUCTION :**

One of the most important factors which affect our country's economy and financial condition is the credit system governed by the banks. The process of bank credit risk evaluation is recognized at banks across the globe. "As we know credit risk evaluation is very crucial, there is a variety of techniques are used for risk level calculation. In addition, credit risk is one of the main functions of the banking community.

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. This makes the study of this loan approval prediction important. Machine Learning techniques are very crucial and useful in the prediction of these types of data.

We will be using classification algorithms such as Decision tree, Random forest, KNN, and xgboost. We will train and test the data with these algorithms.

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<b>S.No.</b>	<b>Parameter</b>	<b>Description</b>
1	Problem Statement (Problem to be solved)	Alibaba Housing Finance that deals in all home loans. They have presence across all urban and rural areas. Customer first apply for home loan after that company validates the customer eligibility for loan. However doing this manually takes a lot of time. Hence it wants to automate the loan eligibility process (real time) based on customer information and verify their documents. So the final thing is to identify the factors/ customer segments that are eligible for taking loan
2	Idea / Solution Description	The interface helps the customer to predict the Applicant Credibility Prediction for Loan Approval using machine learning models
3	Novelty / Uniqueness	<ol style="list-style-type: none"><li>1. Verify the Time taken for Loan disposal</li><li>2. Check user bank credit history</li><li>3. Provide every banks loan process information</li><li>4. Add banks interests comparison features.</li></ol>
4	Social Impact / Customer Satisfaction	<ol style="list-style-type: none"><li>a. Avoid falling for fake offers and plans. This helps to avoid the unauthorized loan and help to black-list them.</li><li>b. This improve the money flow in efficient way.</li></ol>
5	Business Model (Revenue Model)	<ol style="list-style-type: none"><li>a. Consider Your needs and choose Your Loan Amount. This helps in betterment of business profit.</li><li>b. This helps to provide the timely delivery of loan at effective manner.</li><li>c. Improving Client Experience</li></ol>

6	Scalability of the Solution	<ul style="list-style-type: none"><li>a. Check the loan range</li><li>b. Create eligible credit scores</li><li>c. Check Credit Score</li><li>d. Ensure Credit Value</li></ul>
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