

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID00272
Project Name	Project - Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"><li>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.</li></ul>
2.	Idea / Solution description	<ul style="list-style-type: none"><li>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. From this best model is selected and saved in pkl format. We will be doing flask integration and IBM deployment.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>Loan issuance is a very risky proposition for any bank, primarily because of the credit worthiness of the applicants.</li><li>Training the ML model on IBM cloud with multiple dataset improves the accuracy makes our model to think more like a loan approval officer.</li><li>We on the other hand create well trained cloud system and deploy them with lots of data to produce well defined and most accurate solutions unlike other apps in the market.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>Loan prediction in banks is a time consuming process when it is integrated with ML and web development. The customer is able to get the result within 5 to 10 seconds of giving the required details.</li><li>This allows them to be prepared of what documents they have to carry while coming to the bank beforehand.</li></ul>

		<ul style="list-style-type: none"> <li>Also it suggests to them the ways in which they can improve their way of getting their loan.</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>Business models innovation in loan eligibility can contribute to the creation of value, competitive advantage and profitability with new possibilities of action.</li> <li>A revenue model is a blueprint that shows how a bank business will earn revenue or gross income from its standard business operations, and how it will pay for operating costs and expenses.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>Cloud Analytics is not only for particular organizations/governments banks.</li> <li>Banking industry acting under international, domestic or private are also getting satisfied with the bank data analysing process provided as per their needs.</li> </ul>