**Project Design Phase-I**

**Proposed Solution Template**

|  |  |
| --- | --- |
| Date | 19 September 2022 |
| Team ID | PNT2022TMID36233 |
| Project Name | 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) | The customer first applies for a home loan and after that, the company validates the customer eligibility for the loan. The company wants to automate the loan eligibility process based on customer detail provided while filling out online application forms. To automate this process, they have provided a dataset to identify the customer |
| 2. | Idea / Solution description | 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. |
| 3. | Novelty / Uniqueness | Loan prediction approval can use the libraries that can helps to analyse the data. Statistical and prediction is very easy comparing to existing technologies.Results will be accurate compared to other methodologies. |
| 4. | Social Impact / Customer Satisfaction | Loan approval can predict whether assigning the loan to particular person will be safe or not. |
| 5. | Business Model (Revenue Model) | In this experiment firstly collect the data and understand the data with help of describe() and then analyses of data then search for any missing data present in the dataset and then evaluate the confusion matrices and finally model building i.e., used methods Procedures |
| 6. | Scalability of the Solution | Loan Prediction using machine learning tools and techniques can help financial institutions quickly process applications by rejecting high-risk customers entirely, accepting worthy customers, or assigning them to a manual review. Such processes with loan prediction using machine learning intact can reduce loan processing times by nearly 40%. |