

Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID18010
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Solution Architecture Diagram:

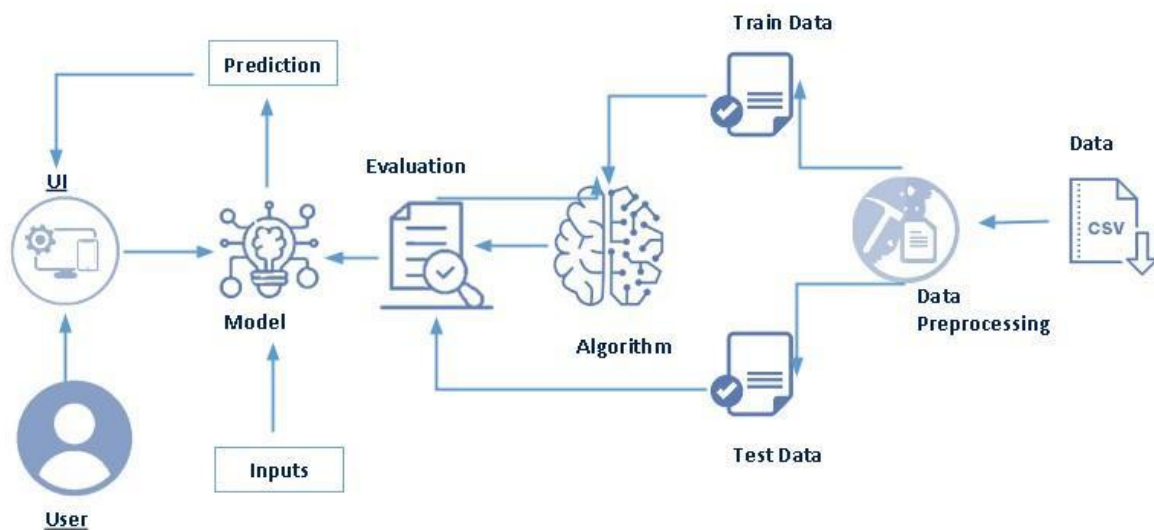


Figure: Architecture and data flow of Applicant Credibility Prediction

Explanation for the Architecture Diagram:

- 1.** First the Model is trained with the obtained dataset. The data set is given by IBM
- 2.** Next the dataset will be pre-processed and then the data would be split to train and test data.
- 3.** Then the model would be saved as a PKL file
- 4.** A website would be created for the interaction and Flask would be used to integrate the model and website
- 5.** The User would give the input, the inputs would be processed and then the prediction would be made.
- 6.** After the prediction is made the output would be given as "Eligible" or "Not Eligible"
- 7.** This can be scaled even more as an API and integrated into the Mobile banking application, making it even more convenient for the customer to know the eligibility