

## Project Design Phase-II

Technical Architecture :

Date	05 November 2022
TeamID	PNT2022TMID31356
ProjectName	SmartLender-ApplicantCredibility PredictionforLoanApproval
MaximumMarks	4 Marks

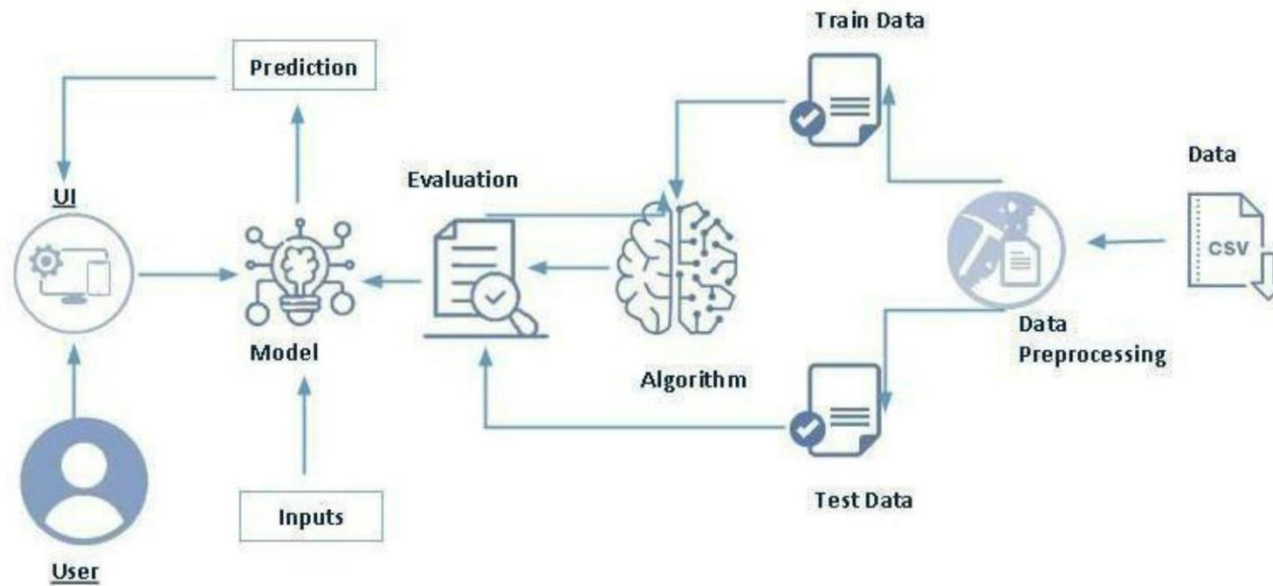


Table-1: Components & Technologies:

S:No	Component	Description	Technology
1	User Interface	Users interact with the application with the help of a web UI	HTML, CSS etc.
2	Building application	Getting user information from UI and feeding it to ML model	Python Flask
3	Visualizing and analyzing data	Reading and understanding the data properly with the help of visualization analyzing techniques.	Python pandas, numpy, pickle, matplotlib.
4	Pres-processing	Handling missing values, Handling categorical data, Handling outliers, Scaling Techniques	Python pandas
5	Database	Loan Approval dataset	.csvfile
6	Cloud Database	Deploying the model on cloud	IBM cloud
7	Machine Learning Model	Using machine learning model for predicting Loan approval	Model building using classification algorithms like Decision tree, Random forest, KNN ,and xgboost

Table-2: Application Characteristics:

S:NO	Characteristics	Description	Technology
1	Open-Source Frameworks	List the open-source frameworks used	IBM Cloud
2	Security Implementations	It's secures information and data	IBM cloud provides layered security controls across network and infrastructure.
3	Scalable Architecture	Its supports various data sizes	Web3.0 IBM Coud
4	Availability	Creating multiple pages for comfortable user interface experience	HTML, CSS, JavaScript
5	Performance	With stand huge data and process them without crashing.	Python