Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID13268
Project Name	Smart Lender Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
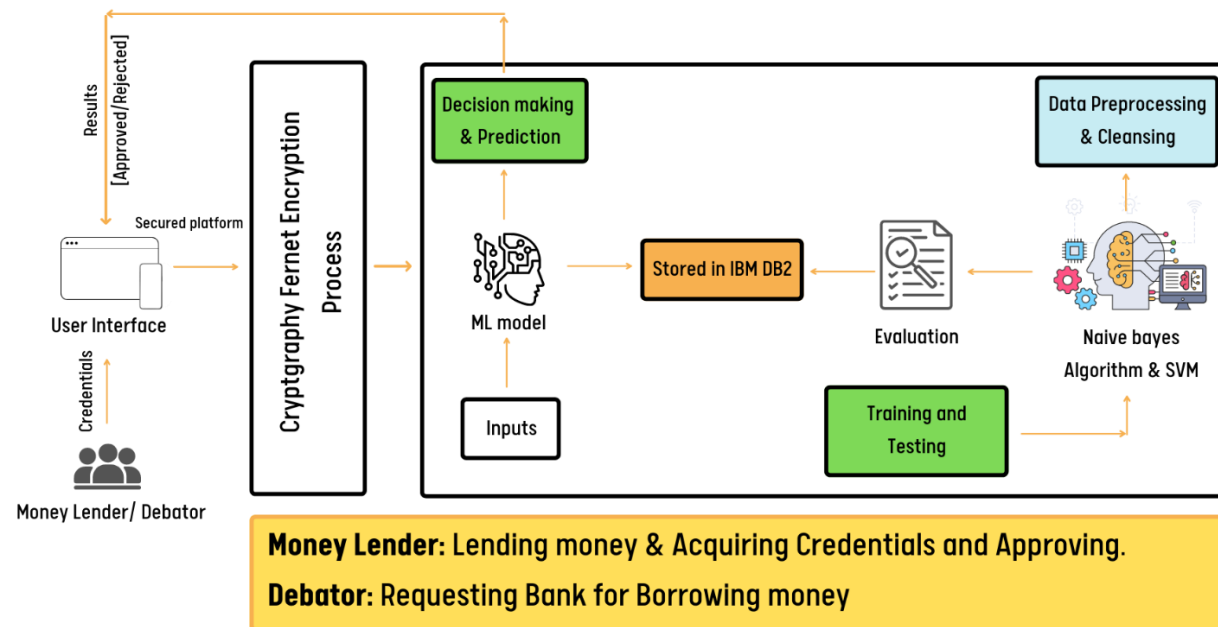
Applicant Credibility Prediction for Loan Approval

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interact with our application through Web UI. HTML, CSS and Python flask.	HTML, CSS, Python flask.
2.	Application Logic-1-Login	When the user clicks on the login button, he/she is directed to login page, if they are registered already.	HTML, CSS, Python flask.
3.	Application Logic-Registration	When the user clicks on the Register button, he/she is directed to Register page for further process.	HTML, CSS, Python flask.
4.	Application Logic-Credibility Verification	After Logged in, when the user clicks on the credibility details form button, he/she directed to the form page to enter the details of applicant for prediction.	Front end - HTML, CSS, Python flask, Database - MySQL, Backend - Python
5.	Database	Data type – String, Numeric.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	NIL
8.	External API-1	Purpose of External API used in the application	NIL
9.	External API-2	Purpose of External API used in the application	Aadhar API
10.	Machine Learning Model	Get the data from the user and predict the data with tested and trained dataset models	Data Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Cloud Server Configuration : IBM Watson DB2	Local, Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	International Business Machines, Python Flask	Cloud, Python Libraries
2.	Security Implementations	Access permission for login page using CAPTCHA	Cryptography, Encryptions
3.	Scalable Architecture	The key of Three tier architecture is improving scalability.	Three Tier architecture
4.	Availability	Load balancer or ADC is the key component that ensures high availability by sending request.	Load balancer.
5.	Performance	The system should be able to handle large number of users at the time	Load balancer.