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

Date	15 October 2022
Team ID	PNT2022TMID03976
Project Name	Small Lender-Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

Technical Architecture:

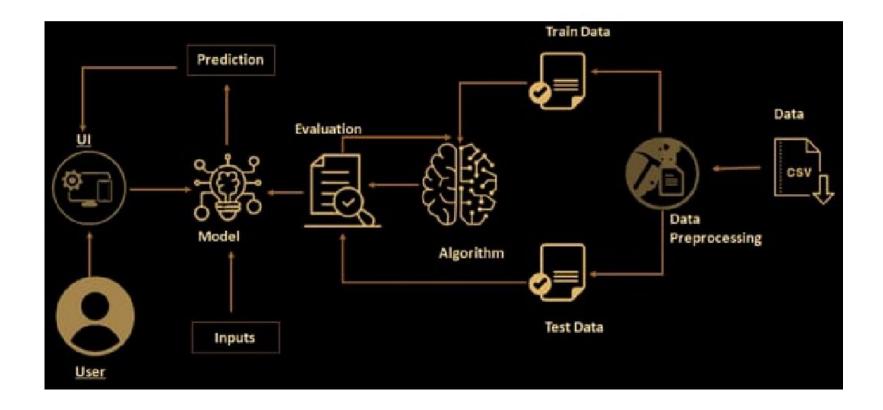


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web Application	HTML, CSS, JavaScript etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Data collection	Data can be collected	Internet application
4.	Dataset	Dataset can be used for training and testing the model	IBM cloud
5.	Database	Data Type, Configurations etc.	MySQL etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	Machine Learning Model	Purpose of Machine Learning Model	Analysis and prediction of results
9.	Infrastructure (Server / Cloud)	Application Deployment Cloud and Service Configuration:	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	To develop the web application, we use flask framework	Flask
2.	Security Implementations	To secure the user login credentials and personal information	SHA-256
3.	Scalable Architecture	To scale the application database	IBM Auto Scaling
4.	Availability	To make the application available all time	IBM Cloud load balancer
5.	Performance	To increase the performance of application to high level	IBM instance