

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

Date	03 October 2022
Team ID	PNT2022TMID06709
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval.
Maximum Marks	4 Marks

Technical Architecture:

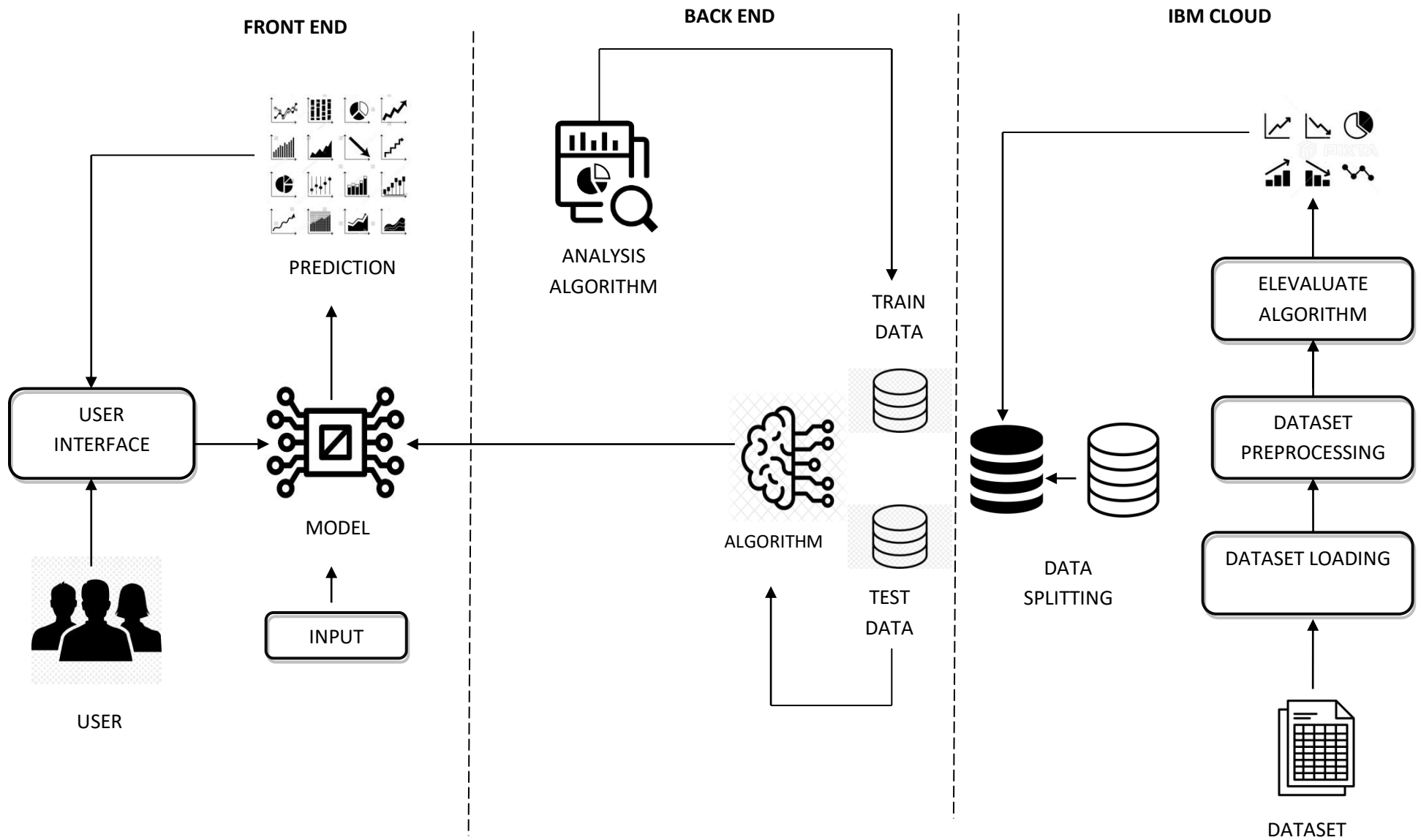


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interact with the application using web UI	HTML, CSS, javascript
2.	User input	Collecting user information and documents	HTML, CSS, javascript, IBM cloud
3.	Visualizing and analysing data	Reading,understanding and analyzing the collected data	Python libraries like pandas,numpy, seaborn and matplotlib
4.	Pre processing of data	Handling missing values and outliers	Python libraries like pandas,numpy and sklearn
5.	Training of model	Training the model using appropriate dataset	Python libraries like sklearn
6.	Testing the model	Testing the model for accuracy prediction	sklearn library of Python
7.	Prediction	Predicting the result	ML algorithms like linear regression, random forest, KNN,etc.
8.	Infrastructure	Application Deployment on Cloud	IBM cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List of open source framework	IBM cloud, Python flask
2.	Security Implementations	securing collected data	IBM cloud provides layered security
3.	Scalable Architecture	Supports many number of users	IBM cloud
4.	Availability	The application is available on different platforms	HTML, CSS, Javascript
5.	Performance	Can predict the results quickly and accurately	Python libraries like sklearn, Pandas, etc. ML algorithms like linear regression, random forest, etc.