Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	20 October 2022
Team ID	PNT2022TMID29739
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

Technical Architecture:

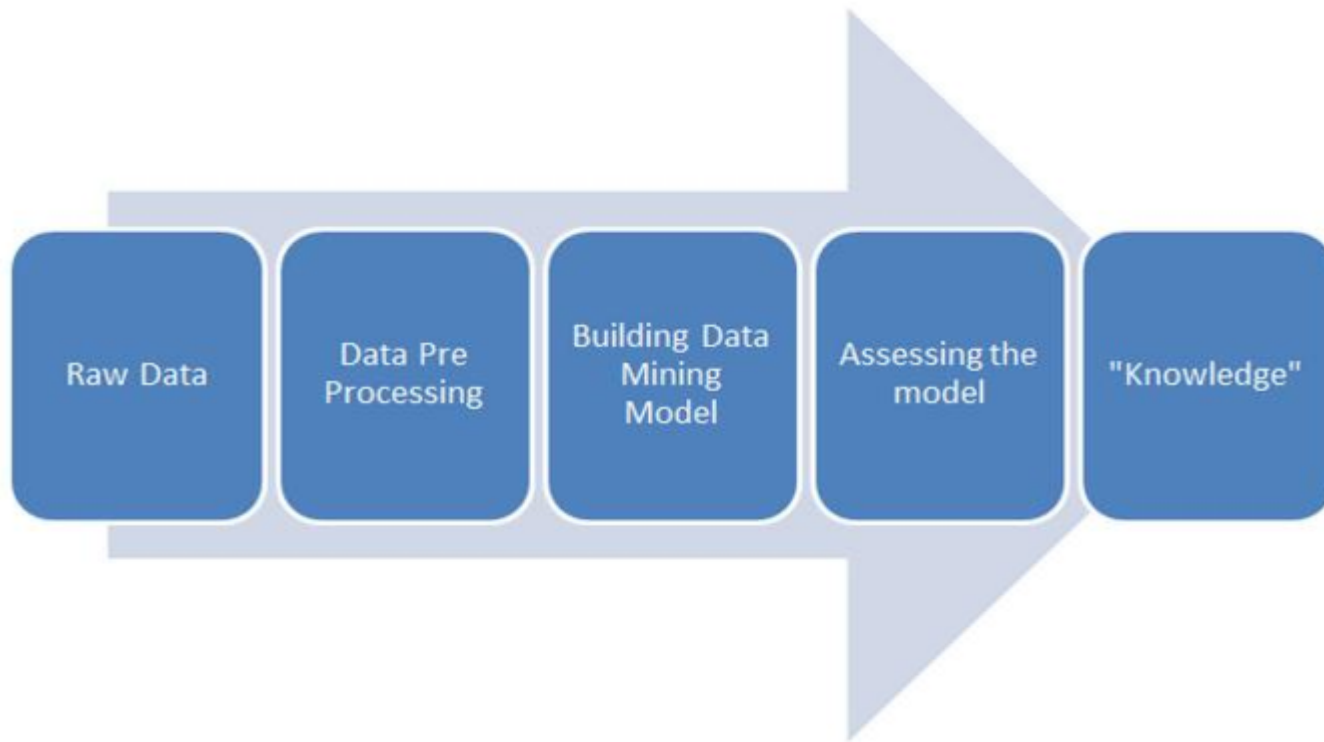The architectural diagram as below and the information as per the table1 & table

Fig. 1.   Steps in Knowledge Extraction

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User Interact with the application to the help of a web UI	HTML, CSS
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 and analyzing techniques	Python(pandas, numpy, matplotlib, seaborn)
4.	Pre-processing or cleaning data	Handling missing values, Handling categorical data, Handling outliers, Scaling Techniques	Python pandas
5.	Database	Loan Approval Dataset	csv file
6.	Cloud Database	Deploying the model on cloud	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cloud
2.	Security Implementations	Its Secures information and data	IBM Cloud provides layered security controls across network and infrastructure.
3.	Scalable Architecture	Its support various data sizes	IBM Cloud
4.	Availability	Creating multiple pages for comfortable user interface experience	HTML, CSS, JavaScript
5.	Performance	Withstand huge data and process them without crashing.	Python