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

Date	03 October 2022
Team ID	PNT2022TMID36132
Project Name	Project – 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

Example: Banking loan Approval Prediction Using Data Science Technique
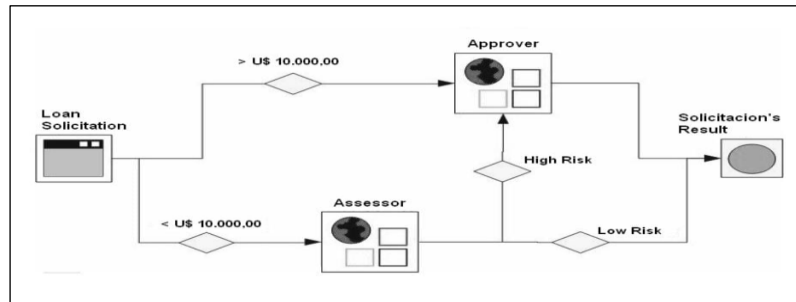
Guidelines:

1. It illustrate how information flows through a process or system.
2. Outline of a general system or detailed as a multi-level procedure.
3. The architecture diagram is based in the complexity of the project.
4. It is best to start with context and decompose process to lower level.
5. This will assist you in ensuring that is clear which organisation or system will be involved

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	customer Interface	Customer interacts with application e.g. banking mobile App, etc…	HTML, CSS, JavaScript.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	Using support vector Machine(SVM)
4.	Application Logic-3	Logic for a process in the application	Data mining, machine learning, modelling and statics

5.	Database	Data Type, Configurations etc.	MySQL etc.
6.	technique	Data analytics to make prediction based on data	Predictive analysis, and regression analysis technique
7.	File Storage	File storage requirements	Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	Applicant income
9.	External API-2	Purpose of External API used in the application	Coapplicant income
10.	Machine Learning Model	Purpose of Machine Learning Model	Determining the worthiness of bank client
11.	Infrastructure (Server)	Application fills loan application online/offline	In web application or official form given in particular bank

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	capacity	Indicates a borrow 's ability to repay a loan based on their available.	Collection of data
2.	Collateral	A valuable asset a borrower pledges to secure a lender interest in the loan.	Cleaning of dataset
3.	Capacity	Based on the income and other financial obligations	Training model
4.	Availability	Selecting features on the basis of the relation with loan approval	Test the model on testing dataset
5.	Performance	Check the accuracy and predict the approval status of the applicant.	Result analysis

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d