

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

Date	16 November 2023
Team ID	592603
Project Name	Project - Smart Lender
Maximum Marks	4 Marks

Technical Architecture:

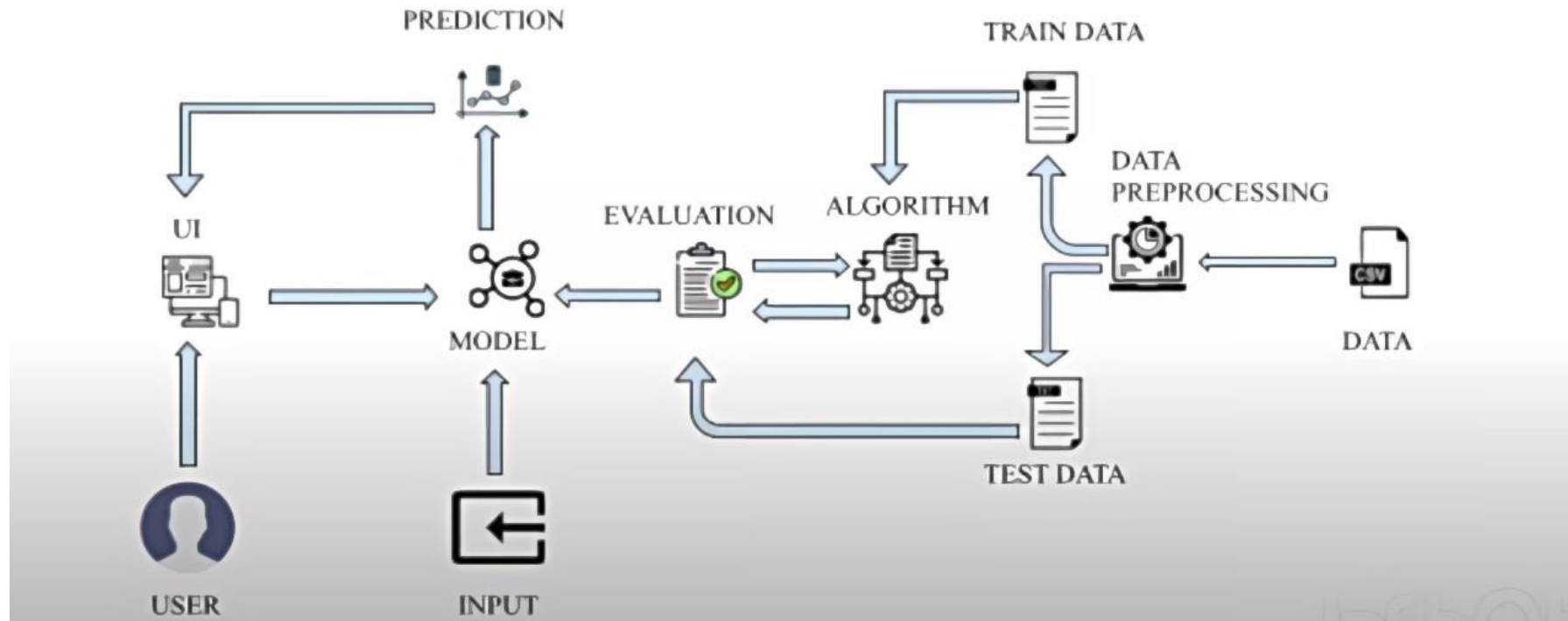


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI	HTML
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	Collect the Dataset Based on the Problem Statement	File Manager
4.	File Storage/ Data	File storage requirements for Storing the dataset	Local System
5.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python, Flask
6.	Deep Learning Model	Purpose of Model	Decision Tree, Random Forest, XGBoost
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: File Explorer Windows	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python's Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Microservices)	Kubernetes. Microservices architecture
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Load balancing
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Content Delivery Networks (CDNs)