Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	19 October 2022
Team ID	PNT2022TMID24994
Project Name	Project - Statistical Machine Learning Approaches to Liver Disease Prediction
Maximum Mark	4 Marks

Technical Architecture:

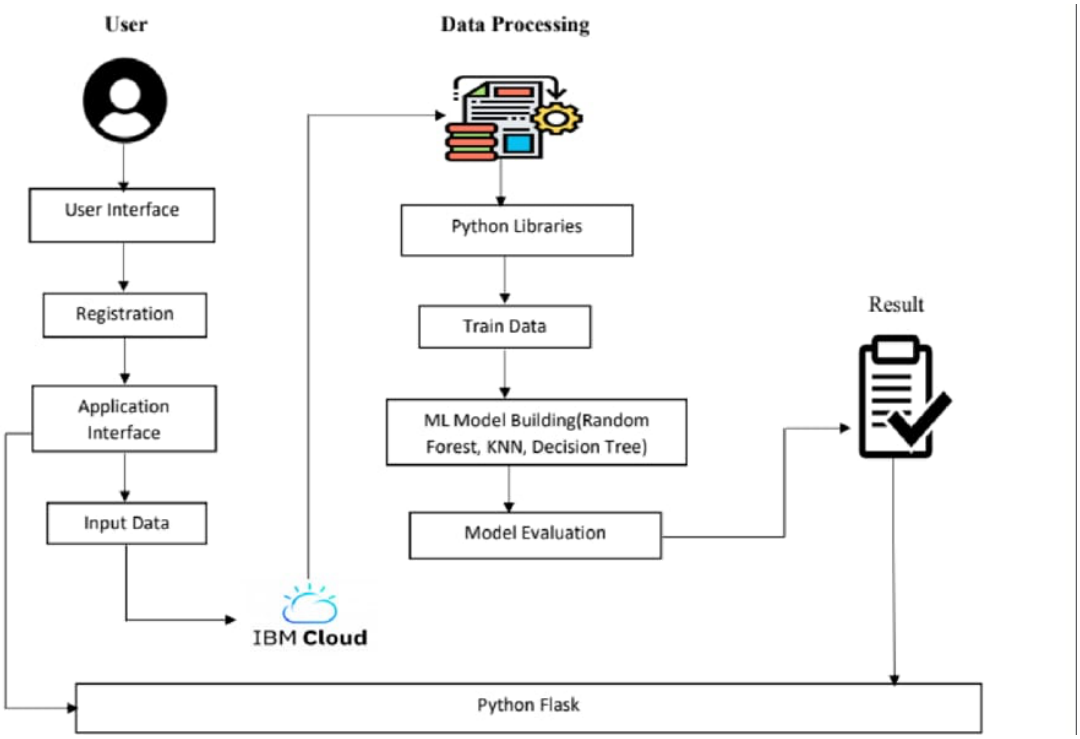

TABLE - 1: Components & Technologies:

S No	Component	Description	Technology
1	User Interface	How user interact with the application	HTML, CSS, Python flask, JavaScript
2	Application Logic - 1	When the user trigger on the login button, he/she is redirected to the home page, if they are already registered.	HTML,CSS, Python flask
3	Application Logic - 2	Get the input from the user and predicted based on the provided result	Machine Learning with Python
4	Application Logic-3	Displays the predicted Result	HTML, CSS, Python flask
5	File Storage	File Storage Requirements	IBM Cloud
6	Machine Learning Model	Get the data from the user and predict the data with tested and trained dataset models	Random forest, Decision Tree, Support Vector Machine.
7	Infrastructure (Server/Cloud)	Application Deployment on Cloud	IBM Cloud

TABLE - 2: Application Characteristics:

S No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Development and Deployment	Python, IBM Cloud
2.	Security Implementations	Security provided by IBM Cloud	Workload Protection, Identity and Access Protection
3.	Scalable Architecture	Model can be Scalable	Python
4	Availability	Available in the cloud	IBM Cloud
5	Performance	High accuracy Performance	Machine Learning Prediction and Classification Techniques