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

Date	02 November 2022
Team ID	PNT2022TMID20879
Project Name	Project - Statistical Machine learning Approaches
Maximum Marks	4 Marks

Technical Architecture:

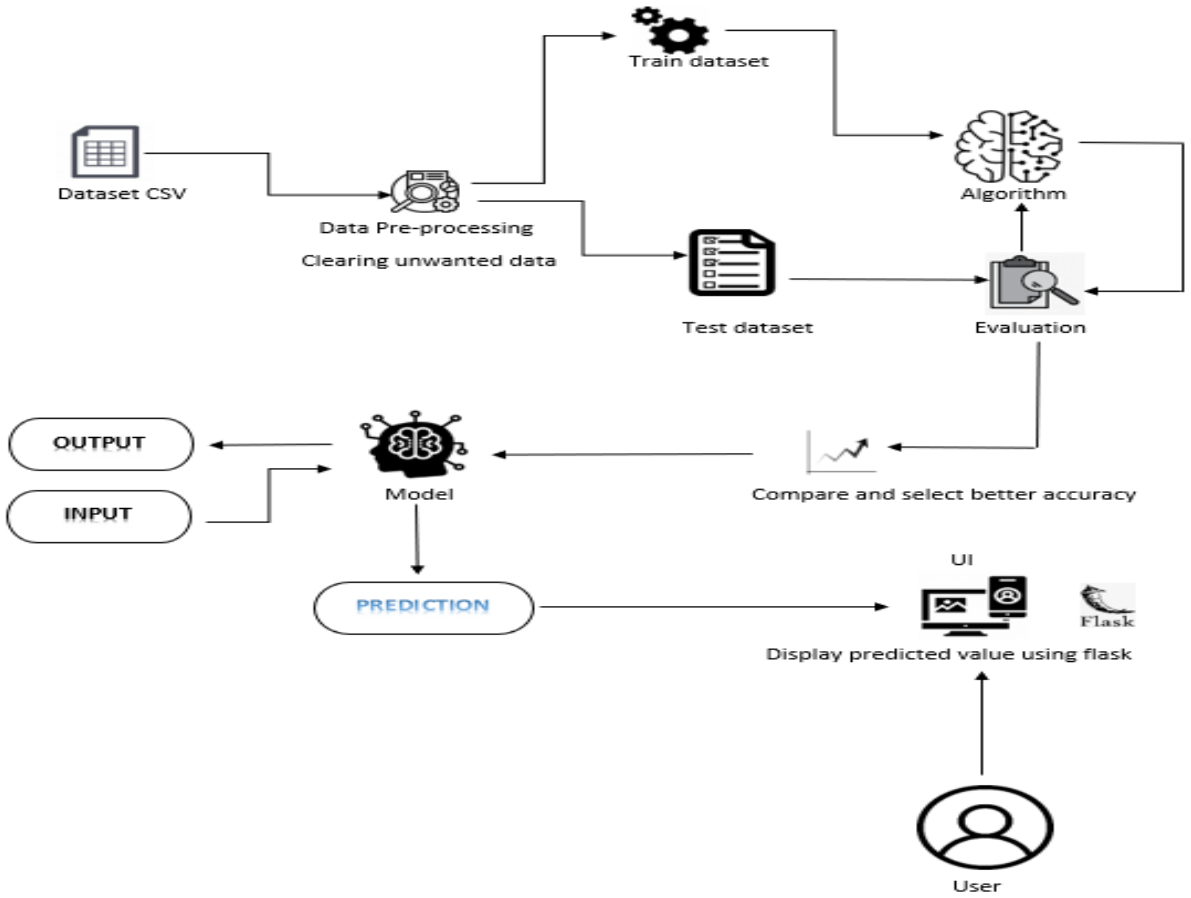

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Getting input from the user and predicting the result using input data to check whether it is affecting or not	HTML, CSS, JavaScript
2.	Detecting Model	Predicting Model using Machine learning algorithm and using pip command to install libraries	Python, NumPy, Pandas, Keras, etc.
3.	Sever	Using flask we can deploy the code and give input to the user and check whether they are affected by diseases or not	Flask, Spyder
4.	Data preprocessing	Handling missing data, Encoding categorical data, splitting the dataset into train and test set, features scaling.	Jupiter, Collab
5.	Machine Learning Model	Using the ML algorithm, we predict better accuracy for liver diseases	SVM, LR, DT
6.	Cloud Deployment	Storing dataset results in IBM cloud	IBM Watson, IBM Cloud

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The list of open-source frameworks used is data preprocessing, model building, application model, OpenCV	Anaconda(numpy,pandas,spyder),Flask
2.	Security Implementations	Storing datasets in the IBM cloud	IBM Watson, IBM cloud
3.	Scalable Architecture	The web interface consists of data flow, entities, intent, and scripts	IBM Watson Assistant

S.No	Characteristics	Description	Technology
4.	Availability	The load balancer is increasing in availability to handle the huge data in the disturbed sever	IBM Watson Assistant
5.	Performance	The performance of the application needs interference by the training model in IBM Watson studio to get a better performance	IBM Watson Assistant