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

Date	25 October 2022
Team ID	PNT2022TMID26111
Project Name	Visualising and Predicting Heart Disease with an Interactive Dashboard
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

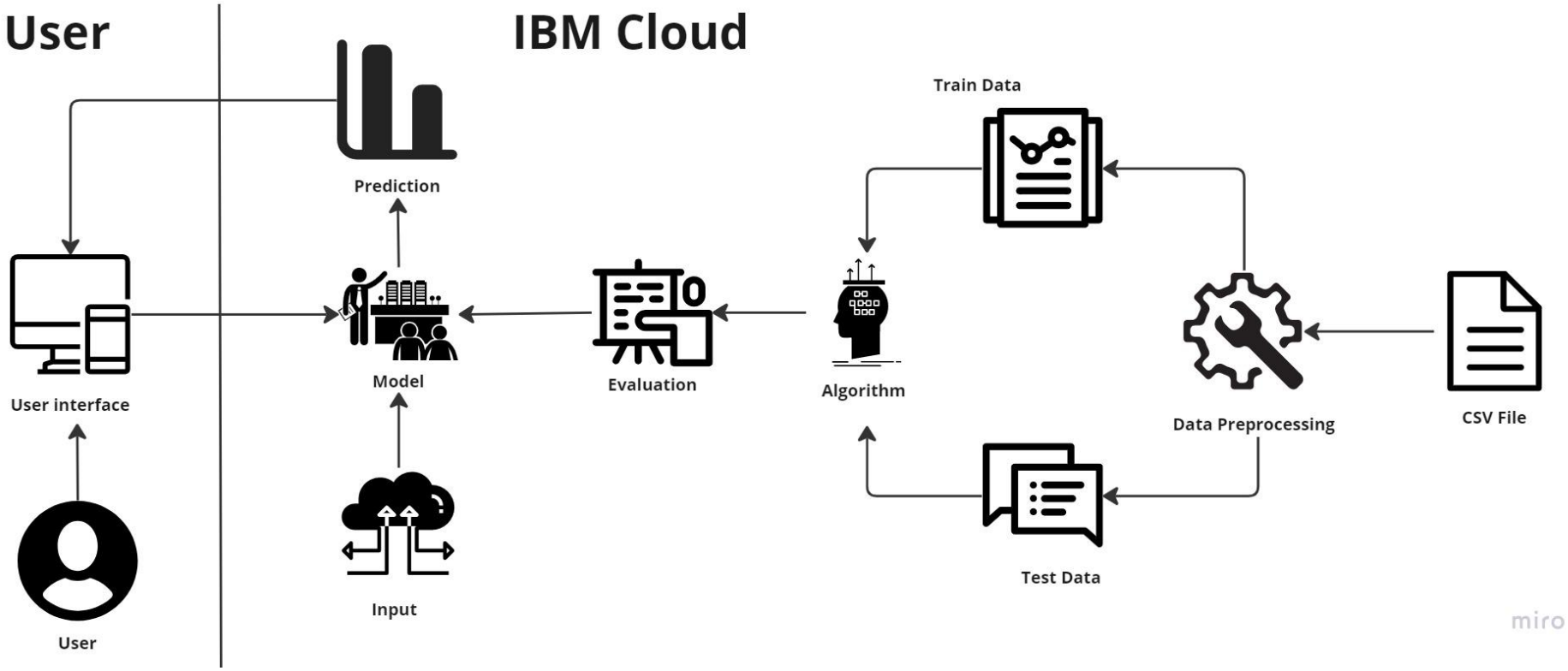
User
IBM Cloud
Prediction
Train Data
User interface
Model
Evaluation
Algorithm
Data Preprocessing
CSV File
Test Data
Input
User
miro

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App.	HTML, CSS, Python
2.	Application Logic-1-Register	If new user,the user needs to register with the requested credentials	Python
3.	Application Logic-2-Login	On clicking the login button the user is directed to the login page,if already a registered user.	Python
4.	Database	Data Type - alphanumeric	MySQL
5.	Cloud Database	Database Service on Cloud is being provided to the admin for future requirements.	IBM Cloud
6.	File Storage	Storing files that are necessary for prediction	Local File system
7.	Machine Learning Model	Support Vector Machine(SVM) algorithm is used for classification and regression models along with data processing	Data Recognition Model, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	International Business Machines.	Python,IBM Cloud
2.	Security Implementations	Access permissions for the login page using CAPTCHA.	IBM Cloud services
3.	Scalable Architecture	It supports higher workloads without any fundamental changes to it.	Scalable databases
4.	Availability	Available for all users.	Load Balancers,Distributed servers
5.	Performance	The system should be able to manage a large number of users at a time.	Load Balancers