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

Date	9 October 2022
Team ID	PNT2022TMID18970
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

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

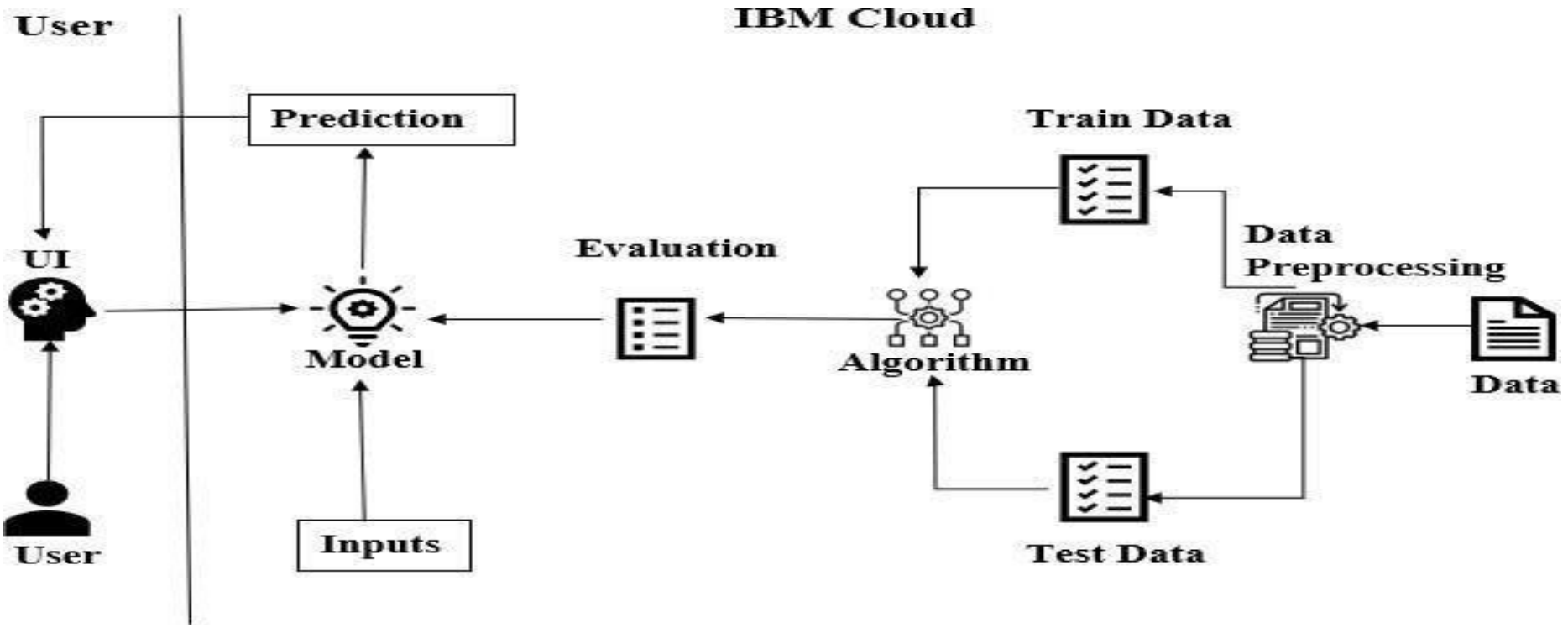

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interact with our application through web User Interface.	HTML, CSS and Python flask.
2.	Application Logic-1-Login.	When the user click on the login button , he/she is directed to login page, if they are registered already.	HTML ,CSS, Python flask.
3.	Application Logic-Registration	When the user click on the Register button , he/she is directed to Register page for further process.	HTML,CSS, Python flask.

4.	Application Logic-Test Vitals Form	After Logged in , when the user click on the test vital form button ,he/she directed to the form page to enter the vitals for prediction.	Front end- HTML ,CSS ,MySQL,Pytjon flask Back end-Python
5.	Database	Data type - String ,Numeric.	MySQL.
6.	Cloud Database	Database Service on Cloud	IBM.
7.	File Storage	File storage requirements	NIL
8.	External API-1	Purpose of External API used in the application	NIL
9.	External API-2	Purpose of External API used in the application	NIL
10.	Machine Learning Model	Get the data from the user and predict the data with tested and trained dataset models	Data Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	NIL

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	International Business Machines.	Cloud.
2.	Security Implementations	Access permission for login page using CAPTCHA	Encryptions.
3.	Scalable Architecture	The key of Three tier architecture is improving scalability.	Three Tier architecture.

4.	Availability	Load balancer or ADC is the key component that ensures high availability by sending request.	Load balancer.
5.	Performance	The system should be able to handle large number of users at the time	Load balancer.