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

Technical Architecture:

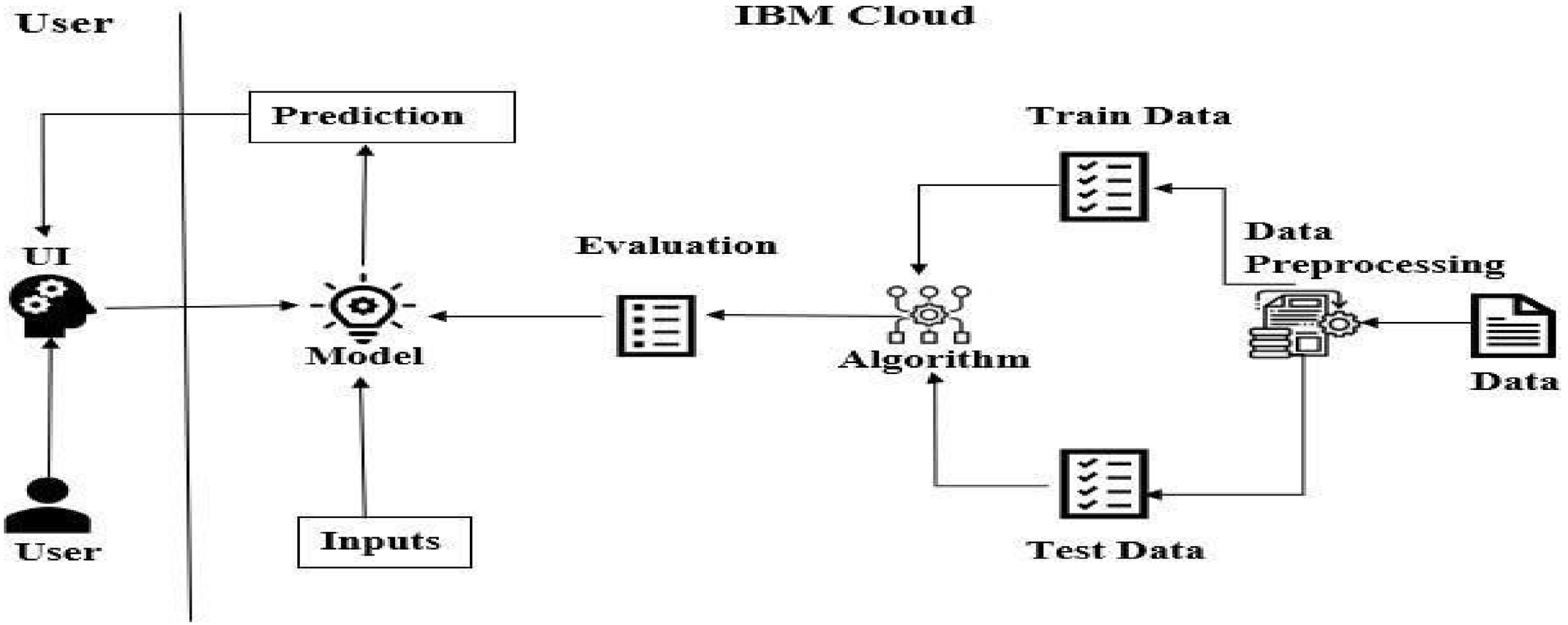

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Enable user to 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 existing user	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 parameters Form	After Logged in , when the user click on the test parameters form button ,he/she directed to the form page to enter the data for prediction.	Front end- HTML ,CSS ,MySQL ,Python 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	None
8.	External API-1	Purpose of External API used in the application	None
9.	External API-2	Purpose of External API used in the application	None
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 :	None

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	International Business Machines.	Cloud.
2.	Security providing	Access permission for login page using CAPTCHA	Encryptions.
3.	Scalable Architecture	The main goal of Three tier architecture is improving scalability.	Three Tier architecture.
4.	Availability	Load balancer or ADC is the key component that ensures high availability to the users	Load balancer.
5.	Performance efficient	The system should be able to handle large number of users at the time	Load balancer.