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

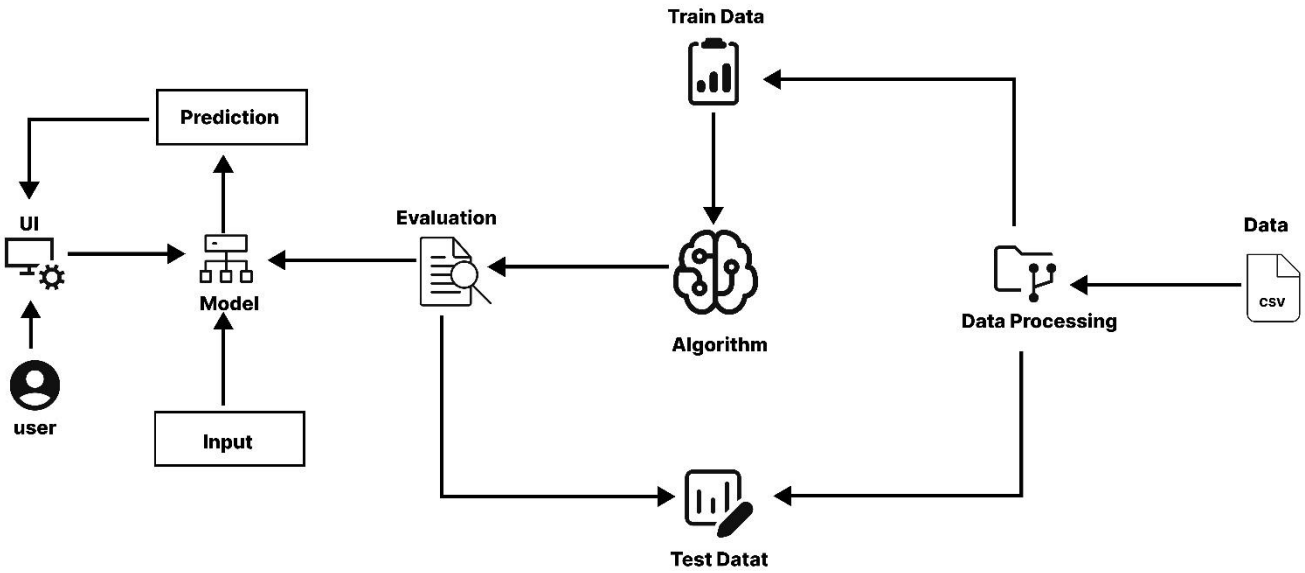
Date	03 October 2022
Team ID	Team-591680
Project Name	Diabetes Prediction Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

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

Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)



Technical Architecture

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	• Users access the diabetes prediction system through a web browser. • They navigate to the website, create an account, and log in. • Input health data through the web interface. • Receive predictions and feedback displayed on the web page.	HTML, CSS, JavaScript
2.	Application Logic-1	The diabetes prediction application facilitates user registration, input of health data, and utilizes machine learning models via APIs for accurate predictions. It offers personalized feedback and recommendations, securely stores user data, and dynamically updates the user interface with understandable visualizations. The application prioritizes security, error handling, and user engagement through features like notifications, promoting proactive health management.	Python
3.	Database	Data Type, Configurations etc.	MySQL.
4.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	Machine Learning Model	The use of machine learning in the diabetes prediction model enables automated analysis of health data, identifying complex patterns and predicting the likelihood of diabetes for individuals. This adaptability allows continuous improvement and personalized assessments, providing decision support for healthcare professionals. Machine learning excels in handling large datasets and revealing the importance of various health indicators in	Random Forest

		predicting diabetes, enhancing early diagnosis and management.	
6.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, Cloud Foundry, Kubernetes, etc.