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

Date	11 November 2023	
Team ID	593184	
Project Name	Project – Diabetes prediction using machine learning	
Maximum Marks	4 Marks	

Technical Architecture:

User Interface (HTML, CSS, JS)

Application Logic (Python, Flask)

Data Processing (Pandas, NumPy, Scikit-learn)

Machine Learning Model (Scikit-learn, Logistic Regression)

Data Storage (Local Database)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	Provides a user-friendly interface for data input	HTML, CSS, JavaScript, Flask
2	Data Processing	Handles data processing and preprocessing tasks	Pandas, NumPy, Scikit-learn
3	Machine Learning Model	Implements the machine learning model for diabetes prediction	Scikit-learn, Logistic Regression
4	Application Logic	Manages the flow and logic of the application	Python, Flask
5	External API	Interface to external APIs for additional data (if applicable)	Not Applicable

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Scalability	The application is designed to handle an increasing number of users	Flask
2	User-Friendly	The user interface is intuitive and easy to use	HTML, CSS, JavaScript
3	Real-Time	The application provides real-time predictions	Flask, Python
4	Portability	The application can be easily deployed on different platforms	Docker (for containerization)