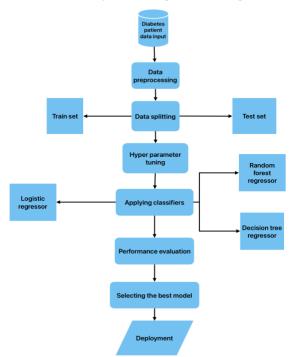
## Project Design Phase-II Data Flow Diagram & User Stories

Date	9 November 2023
Team ID	593184
Project Name	Project – Diabetes prediction using machine learning
Maximum Marks	4 Marks

## **Data Flow Diagrams:**

## **Dataflow diagram**

Diabetes prediction using machine learning



## **User Stories:**

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Individual User	Accurately predict the risk of developing diabetes for individual users	USN - 1	As an individual user, I want to provide my personal health data to the diabetes prediction system to assess my risk of developing diabetes.	The system accepts personal health data inputs (age, weight, height, blood pressure, blood sugar levels, family history of diabetes). It preprocesses the data for accuracy and completeness, then uses a trained machine learning model to predict the user's diabetes risk. The prediction, along with explanations of influencing factors, is presented to the user. The system offers options to learn more about diabetes, its risk factors, and prevention measures.	High	Sprint - 1
Individual User	Track blood sugar levels and receive personalized management recommendations	USN - 2	As an individual user, I want to track my blood sugar levels over time and receive personalized recommendations for managing my diabetes.	The system should allow users to enter and track their blood sugar levels on a regular basis. The system should analyze the user's blood sugar trends and provide personalized recommendations for managing their diabetes.	Medium	Sprint - 2
Individual User	Access personalized educational content and support materials	USN - 3	As an individual user, I want to receive personalized educational content and support materials related to diabetes prevention and management.	The system should provide users with access to a library of educational content and support materials related to diabetes prevention and management. The system should recommend personalized content based on the user's risk factors and needs.	Medium	Sprint - 2
Healthcare Provider	Access and analyze patient data for personalized risk assessment and care recommendations		As a healthcare provider, I want to access and analyze patient data, including personal health information, medical history, and laboratory test results, to provide personalized diabetes risk assessment and care recommendations.	The system should allow healthcare providers to access and view patient data securely. The system should provide healthcare providers with tools to analyze patient data and identify potential risk factors for diabetes. The system should assist healthcare providers in generating personalized diabetes risk assessments and care recommendations for their patients.	Medium	Sprint - 3
Researcher	Conduct research on diabetes	USN - 5	As a researcher, I want to use the system's data and	The system should provide researchers with access to anonymized patient data for research purposes. The system should provide	Low	Sprint - 3

prediction and prevention using the system's data and machine	machine learning models to conduct research on diabetes prediction and prevention.	researchers with tools to analyze patient data and identify patterns and trends related to diabetes risk factors and outcomes. The system should allow researchers to use the system's machine learning models to develop and test new diabetes prediction and prevention strategies.	
learning models			