

# Project Name: AI Based Diabetes Prediction System

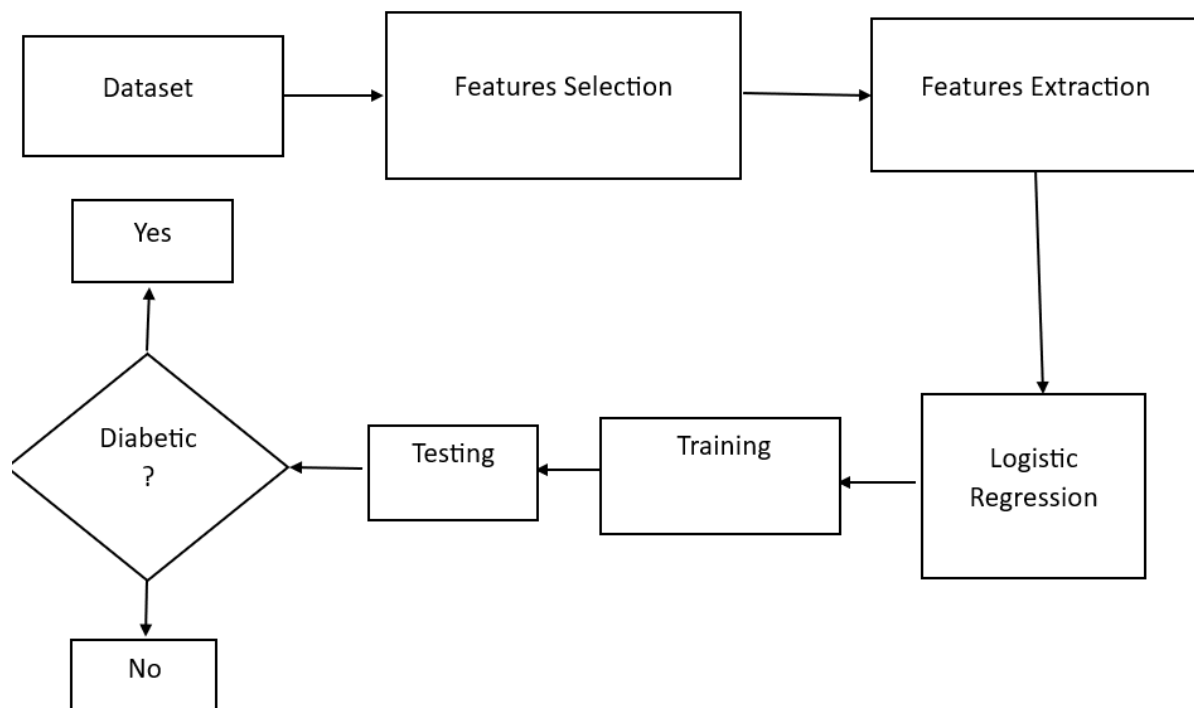
Project Code:203476

## Problem Definition:

The problem is to build an AI-powered diabetes prediction system that uses machine learning algorithms to analyse medical data and predict the likelihood of an individual developing diabetes. The

system aims to provide early risk assessment and personalized preventive measures, allowing individuals to take proactive actions to manage their health.

## Innovative Design:



## Algorithm used for modelling:

This project is modelled by using the logistic regression algorithm because our analysis finds five main predictors of diabetes: glucose, pregnancy, body mass index, age, and diabetes pedigree function. These risk factors of diabetes identified by the logistic regression were validated by the decision tree and could help classify high-risk individuals and prevent, diagnose and manage diabetes.

The data is split into training and testing sets. The common split ratios are 80:20 and 70:30. A Logistic Regression algorithm is used to make the predictions and check for the accuracy.

## Innovation idea:

The project is going to be a machine learning as well as the web based. Perform all the steps from Data gathering to Model deployment

Machine learning is used to build the model, which predicts the whether the person have diabetics or not.

The result will be shown in the web page and based on the result current level of the patient whether he or she is in danger or intermediate or safe. This Status will be provided to the user so that they concentrate on their health.

## Requirements needed:

seaborn

Flask

matplotlib

pandas

numpy

scikit\_learn