

# **USER MANUAL FOR DIABETES PREDICTION WEB APP**

Welcome to the Diabetes Prediction Web Page! This manual will guide you through the process of using the web page to predict the likelihood of diabetes based on several input parameters.

## **1. Introduction**

The Diabetes Prediction Web Page allows users to input personal medical data and receive a prediction on whether they are likely to have diabetes. The prediction is based on a trained machine learning model that evaluates the input parameters.

## **2. Input Fields**

The web page contains several input fields that you need to fill in with your personal medical information. Here are the descriptions of each field:

1. **Pregnancies:** The number of times you have been pregnant.
2. **Glucose:** Plasma glucose concentration a 2 hours in an oral glucose tolerance test (mg/dL).
3. **BloodPressure:** Diastolic blood pressure (mm Hg).
4. **SkinThickness:** Triceps skinfold thickness (mm).
5. **Insulin:** 2-Hour serum insulin ( $\mu$ U/mL).
6. **BMI:** Body mass index (weight in kg/(height in m)<sup>2</sup>).
7. **DiabetesPedigreeFunction:** Diabetes pedigree function (a function which scores likelihood of diabetes based on family history).
8. **Age:** Age in years.

## **3. Using the Web Page**

Follow these steps to use the Diabetes Prediction Web Page:

1. **Navigate to the Web Page:** Open your web browser and navigate to the Diabetes Prediction Web Page.
2. **Enter Data in Input Fields:** Enter your personal medical data in the respective input fields. Ensure that the data is accurate for the most reliable prediction.
  - **Pregnancies:** Enter the number of pregnancies.
  - **Glucose:** Enter your plasma glucose concentration.
  - **BloodPressure:** Enter your diastolic blood pressure.
  - **SkinThickness:** Enter your triceps skinfold thickness.
  - **Insulin:** Enter your 2-hour serum insulin level.
  - **BMI:** Enter your body mass index.
  - **DiabetesPedigreeFunction:** Enter your diabetes pedigree function score.
  - **Age:** Enter your age.
3. **Click on the "Predict" Button:** After filling in all the input fields, click on the "Predict" button. The web page will process your input data using the trained machine learning model.

4. **View the Result:** Once you click on the "Predict" button, the web page will display the result indicating whether you are likely to have diabetes or not. The result will be shown on the same page.

## 4. Example

Here is an example of how to fill in the input fields and get the prediction:

- Pregnancies: 2
- Glucose: 120
- BloodPressure: 80
- SkinThickness: 25
- Insulin: 85
- BMI: 28.5
- DiabetesPedigreeFunction: 0.5
- Age: 30

After entering these values, click on the "Predict" button. The web page will then display a message such as "You are likely to have diabetes" or "You are unlikely to have diabetes."

## 5. Tips for Accurate Prediction

- Ensure that the data you enter is as accurate as possible.
- If you are unsure about any of the input fields, consult with a healthcare provider to obtain the correct values.
- Use recent and relevant medical data to ensure the prediction is based on your current health status.

## 6. Conclusion

The Diabetes Prediction Web Page is a useful tool for estimating the likelihood of diabetes based on personal medical data. By following this manual, you can easily input your data and obtain a prediction. Remember, this tool is not a substitute for professional medical advice, diagnosis, or treatment. Always consult with a healthcare professional for any medical concerns.

Thank you for using the Diabetes Prediction Web Page!