

DIABETES PREDICTION APP

USER MANUAL
-Megha Nilesh Varma



TABLE OF CONTENTS

01

ACKNOWLEDGEMENT

05

DEMO VIDEO

02

MY INTRODUCTION

06

TOOLKIT WALKTHROUGH

03

INTERNSHIP EXPERIENCE

07

CONTACT

04

ABOUT APP



ACKNOWLEDGEMENT

I would like to express my special thanks to my parents, clevered mentors and google resources for helping me to successfully complete this project.

My Introduction



Myself, Megha Niles Varma. I am 18 years old and recently graduated Highschool. I am very passionate about Biology and its real-life applications using engineering, and I look forward to pursuing my higher studies in this field.

INTERNSHIP JOURNEY SO FAR..

My experience so far with the internship has been very exciting. I got to learn many new things and the mentors have been very supporting. It has been a great learning opportunity and the insights that I have gotten into AI lately are definitely going to help me in my future endeavours.

DIABETES PREDICTION APP

Uses data like BMI, Age, and number of pregnancies incurred, analysis it, and determines whether a person has diabetes or not. If diabetes is detected, it suggests to the user further steps and resources which can be used by them to learn more about their condition and what they can do to help it.

WHERE THIS APP COULD BE USED

About 422 million people worldwide have diabetes and these numbers are gradually increasing. It is no doubt that prevention is better than cure so people who have the required data at hand can use this app for early stage prediction and hence know to take steps in order to keep the disease in control.

WHY I DECIDED TO WORK ON THIS PROJECT

This project enabled me to put bio sciences and mathematics into practical application using AI technology so I decided to choose it.

| ABOUT APP...



USING THE APP

ROOT/MAIN WINDOW

The screenshot shows a Tkinter window titled "tk" with a light blue background. At the top, the text "DIABETES PREDICTION" is displayed in a green box. Below this, there are three input fields for "NUMBER OF PREGNANCIES:", "BMI:", and "AGE:". Each input field has a small yellow button with a question mark next to it. A green box labeled "DETERMINE RESULT" is positioned below the input fields. At the bottom right, there is a yellow button labeled "REFRESH". Numbered callouts are present: a bracket labeled "1" groups the input fields; a callout labeled "2" points to the question mark button next to the "NUMBER OF PREGNANCIES:" field; a callout labeled "3" points to the "DETERMINE RESULT" button; and a callout labeled "4" points to the "REFRESH" button.

1. Parameters for diabetes prediction used by the app with their respective entry boxes.

2. Button to reveal extra information and get help with entering the required data for prediction.

3. Prediction button (to be clicked after all necessary data is entered). It will give the final result.

4. Refresh button – click to clear the entry boxes.

WINDOW DISPLAYED WHEN RESULT= NOT DIABETIC

4 SIMPLE WAYS FOR
**PREVENTION OF
DIABETES**

 **1 REGULAR HEALTH SCREENINGS**
Know your risk by trying out online risk screening questionnaire and go for tests if you are at risk.

2 HEALTHY DIET
Eat in moderation. Increase your intake of whole grains, fruits and vegetables. Reduced intake of sugar and saturated fats. 

 **3 EXERCISE**
Adopt an active lifestyle. Try 150 minutes of exercise every week. Find an activity (i.e. swimming, jogging, tai-chi or yoga) you like to motivate you to exercise!

4 NO SMOKING & DRINKING
Try to quit smoking and limit your alcohol intake! 

**CONGRATULATIONS
DIABETES TEST
RESULT NEGATIVE!**

**PRECAUTIONARY
STEPS ENCOURAGED**





EXIT



Exit button- to be clicked to close the result window and return back to the root window.



Warning: these results are based on analysis of a finite dataset and not very strong determining parameters and may not be 100% accurate. Proper medical guidance is always advised in case of doubts.


WINDOW DISPLAYED WHEN RESULT= DIABETIC


7 STEPS FOR BETTER LIVING WITH DIABETES




1 EAT HEALTHY

Eat lots of vegetables and fruit
Reduce or eliminate sugary foods and drinks
Watch or reduce carbs

Watch portion sizes

Eat regular meals

Lose 10-20 pounds if you are overweight



2 BE ACTIVE

Exercise 5 days a week

Be active 30 minutes a day

3 MONITOR

Check your blood sugar levels.
Know your A1C

Check your blood pressure,
cholesterol, eyes, feet and teeth

4 TAKE MEDICATION

Know your pills and insulin,
understand how they work
and take the right doses at
the right times

5 PROBLEM SOLVE

Recognize your high and low
blood sugars, understand what
caused them and learn to treat
and prevent them

6 REDUCE RISK

Quit smoking

Do regular health exams
(eye, foot & dental)

See your doctor regularly
for check-ups and tests

7 COPE WELL

Get support from your family,
friends and diabetes care team

Set realistic goals and
work toward them

**DIABETES TEST
RESULT POSITIVE**
**TAKE NECESSARY
STEPS AND VISIT A
DOCTOR**

EXIT

Exit button- to be clicked to close the result window and return back to the root window.

Warning: these results are based on analysis of a finite dataset and not very strong determining parameters and may not be 100% accurate. Proper medical guidance is always advised in case of doubts.

DEMO VIDEO

Toolkit Walkthrough

[https://d.docs.live.net/0a406949f6f7d214/Documents/Megha/clevered%20internship%20programme/Diabetes%20prediction%20app/Deliverables/AI-App%20Development%20Toolkit%20Workbook%20\(1\).xlsx](https://d.docs.live.net/0a406949f6f7d214/Documents/Megha/clevered%20internship%20programme/Diabetes%20prediction%20app/Deliverables/AI-App%20Development%20Toolkit%20Workbook%20(1).xlsx)

CONTACTS

Reach out to me through:-

Email – meghavarma2005@gmail.com

For any questions, concerns, and suggestions about the App.



THANKS!