DIABETES RISK ASSESSMENT MODEL

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PROJECT OVERVIEW

- Diabetes Risk Assessment Model
- Prompts the user to give information regarding several risk factors & gives results

PROBLEM

Diabetes is a chronic disease that impacts about 12% of the U.S. adult population and may lead to more serious health problems if not treated or detected early.

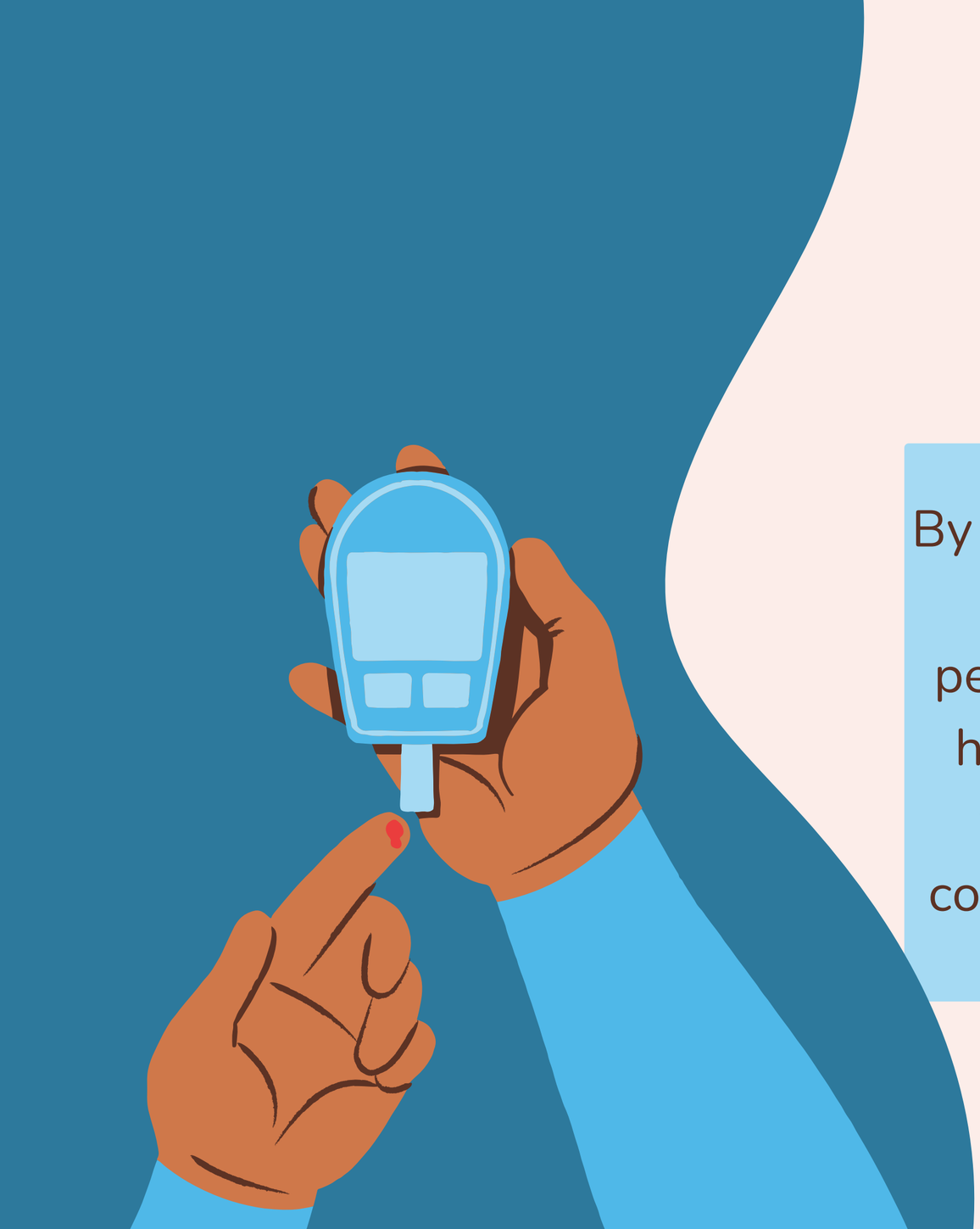
WHAT RISK FACTORS ARE INCLUDED IN OUR MODEL?

SOME RISK FACTORS FOR DIABETES ARE:

- **High Blood Pressure**
- High Cholesterol
- **High BMI**
- Smoker
- Stroke History
- Heart Disease or Attack History
- Lack of Physical Activity
- Lack of Fruits & Vegetables in Diet
- Heavy Alcohol Consumption

OTHER FACTORS THAT MAY IMPACT DIABETES DIAGNOSIS ARE:

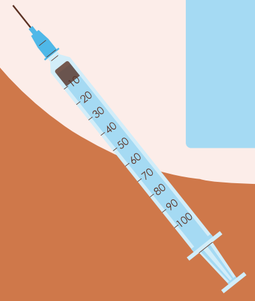
- Type of Healthcare
- Doctor Visit Frequency
- **General Health**
- **Physical Health**
- **Mental Health**
- Sex
- **Age**
- **Education**
- Difficulty Walking



SIGNIFICANCE

By providing users with likelihood of them having or developing the disease based on their personal health record and lifestyle choices, we hope to encourage patients testing positive to focus on mitigating the risk factors they can control in order to avoid contracting the disease.

DATA



Let’s take a look at our data!

METHODOLOGY

- We first picked one of our datasets from the proposal to train the model & pick up patterns of diabetes diagnoses based on risk factors
- We then selected another dataset to use as our validation set to ensure our model was not overfitted to the original dataset
- Finally, we used a test set of unseen data to evaluate the accuracy of our model

RESULTS

- Our code worked, and the model was able to correctly predict the diagnosis of patients based on the inputs we used
- One improvement could include expanding the amount of inputs taken into account to predict the diagnosis

DEMO TIME

THANK YOU!