

Diabetes EDA

- Introduction

Diabetes is a chronic health condition that affects how your body turns food into energy. There are two main types of diabetes: type 1 and type 2. This dataset is originally from the National Institute of Diabetes and Digestive and Kidney Diseases. The objective of the dataset is to diagnostically predict whether a patient has diabetes, based on certain diagnostic measurements included in the dataset. Several constraints were placed on the selection of these instances from a larger database. In particular, all patients here are females at least 21 years old of Pima Indian heritage. In order to adequately analyze these data to answer the key questions and make recommendations, We will follow the key steps of Data Analysis Process: *Ask, Prepare, Process, Analyze, Share and Act*

- Ask

Analyze data to gain insights into how are females are getting diagnosed with diabetes

1. Who are the women that got diabetes?
2. How could these women prevent themselves from getting diabetes?
3. Diabetes correlated with what ?

- PREPARE

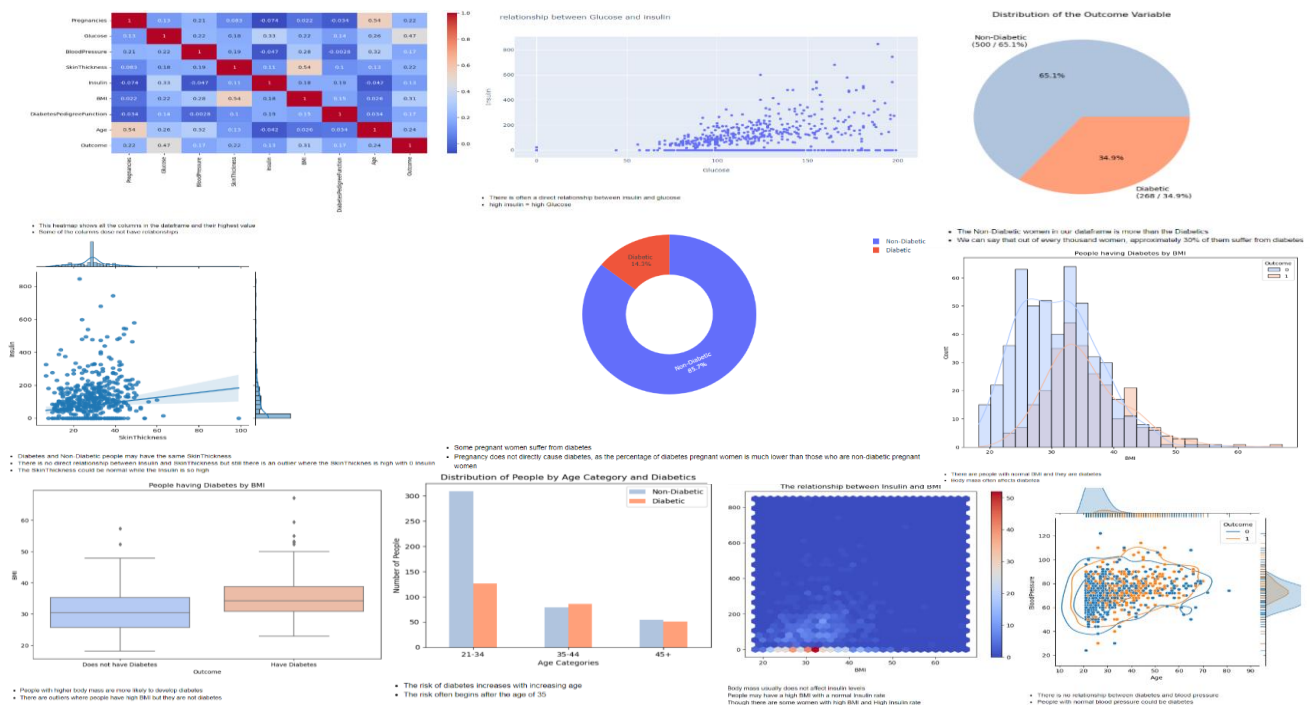
- We will utilize the [ROCCC](#) (Reliable, Original, Comprehensive, Current & Cited) data test model to determine the credibility and reliability of the dataset.
- Reliable — **HIGH** — no sample bias, the sample size is high .
- Original — **HIGH** — National Institute of Diabetes and Digestive and Kidney Diseases
- Comprehensive — **HIGH** — Data is within the parameters are clear and good.
- Current — **medium** — data was sourced and put online 2022
- Cited — **HIGH** — the data can be found on Kaggle.

- PROCESS

Here, we will perform data cleaning operations to ensure the dataset is correct, complete and error free.

- Share

1. All variables except insulin seem to have some degree of normal distribution
2. All variables have outliers



- Act

1. Women who tend to have a high level of bmi, insulin, and glucose are more likely to get diabetes
2. To prevent and secure females they need to assure that a healthy lifestyle is accomplished by 1- Maintain a healthy weight 2- eat healthy diet 3- get a regular exercise routine
3. There is no one thing that is correlated with diabetes the higher the unhealthy habits the more there is a risk accumulation of getting diabetes.

GROUP MEMBERS:

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