Project Proposal

-Problem statement:

There are many pregnant women who suddenly miscarry, which affects their psychological state, so we will build a model capable of predicting the continuation of pregnancy or not.

The sooner a miscarriage occurs in the first weeks of pregnancy, the easier and safer it will be.

-Data Description:

We got the data from NCBI containing 1000000 observations and 16 features.

Columns:

Miscarriage/No Miscarriage (target variable) → Int .
Age → The maternal age of woman, Double.
BMI → It is an attempt to quantify the amount of tissue mass , Double.
Nmisc → The number of previous miscarriages of woman during her pregnancies,Int.
Activity → The level of the activity of woman during the day, Int.
Location → Location where woman spends her time, int.
Temp → Body Temperature of the woman, Double.
BPM → Heart Rate Variability (HRV) per minute, Long.
Stress → Stress Emotions, Long.
BP → Blood Pressure indicator, Long.
Biking → go somewhere by bicycle, Int.
Walking → the activity of taking walks, Int.
Driving → controlled operation and movement of a vehicle, Int.
Sitting → a limited period of time during which you sit and do a particular activity, Int.
Alcohol Consumption → act of ingesting typically orally a beverage containing ethanol, Int.
Drunk → having the faculties impaired by alcohol, Int.

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-Tools:

- Programs: Jupyter Notebook
- Libraries: numpy, pandas, matplotlib, seaborn, csv, GridSerchCV.
- Functions: shape, value_counts, info, drop, astype, groupby, mean.
- Plots: pointplot, barplot, histogram, scatter, distplot, Pie Chart

-MVP Goal:

The goal of this project is to predict the continuation of pregnancy or not using Classification algorithms.