Predicting Social Anxiety Levels

Using Regression Modeling

Academic Year: 2024/2025

Semester: Spring

Team Leader:

Mahmoud Naif

Team Members:

Mohamed Reda

Mohamed Abdel Fattah

Problems Faced with the Data:

The dataset had several issues that impacted on model training, including:

- Presence of extreme values
- Duplicate rows
- Non-linear distribution and noise in data

How the Problems Were Solved:

To address the data issues:

- Extreme values were handled using the Interquartile Range (IQR) method
- Duplicate rows were removed
- Log transformation was applied to improve linearity and reduce noise

Software and Tools Used:

The model was developed using Python in Jupyter Notebook. The following libraries were used:

- pandas and numpy for data preprocessing
- sklearn for training and evaluating the regression model