Regression Assumptions After Modeling

Executive summary for the New York Taxi and Limousine Commision

Overview

We have been contracted to create a Regression model to predict fares for cab rides. This is the summary goes over the results of this Regression model.

Problem

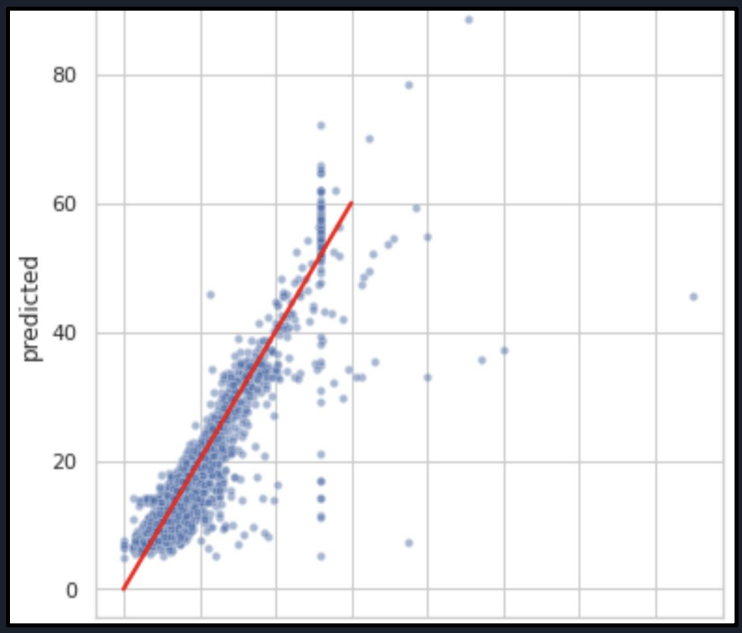
The original ask for this section of our case study is to create the model and ensure accuracy of the predictions of fares.

Solution

We have decided to use multiple linear regression for the solution to their question of fare predictions. In this study the model was successful, proving the model is not biased nor over-fit.

Details

Using linear regression for the modeling I created this scatter plot of predictions and actual costs from the existing data. There is a strong level of confidence that this model will make accurate predictions.
With further analysis we will see this accuracy increase.



Next Steps

From here we will be implementing a machine learning algorithm to make these predictions in real time.