DataCamp X Toyota Case Study

Analysis on price range of second hand Toyota vehicles

The problem

Context

The UK Sales team are having issues pricing used cars that arrive at the dealership

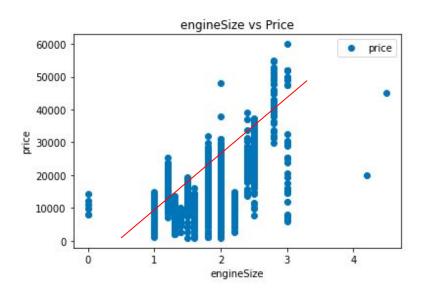
Problem statement

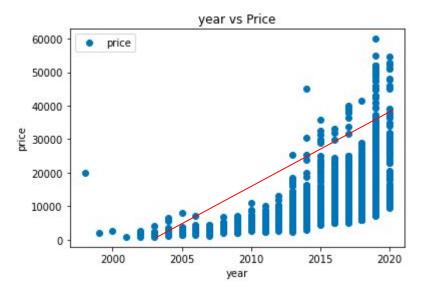
To be able to make predictions for the price of vehicles within a range of £1500

Heat map to show correlation of Price & Numerical values

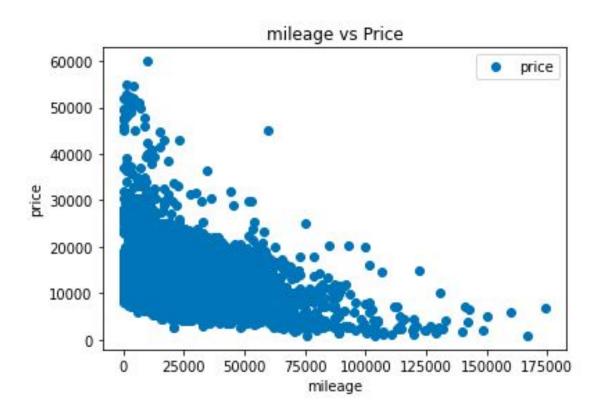


Engine Size and Year





Mileage



Correlation Assessment

Age and Size counts

Age and engine size have the biggest impact on the price of the vehicle

MPG

Price has virtually no correlation to miles per gallon - economy vehicles - aimed at a cheaper / family orientated market

Solution

Linear Regression Model

Based on data provided:

- Able to build a model to predict prices of vehicles
- Accuracy of 96%.

How this can impact the business

- This model can predict the price of vehicles that come into the dealership
- We can explore adding a markup on the vehicles and test which percentage gets the best results
- Example: A/B Test
- £500 or £1000 to every vehicle > track performance > adjust