

BIA Project 3 - Used Cars Dataset

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Description:

This dataset contains data about 762,091 used cars from cars.com. The data was collected on Apr, 2023.

Source: [Used Cars Dataset | Kaggle](https://www.kaggle.com/datasets/andreinovikov/used-cars-dataset) <https://www.kaggle.com/datasets/andreinovikov/used-cars-dataset>

File Type: .csv file from Kaggle.com

Key Variables: There are 20 key variables/columns in the data

1. **manufacturer** - name of the car manufacturer
2. **model** - name of the car model
3. **year** - the year when the car was produced
4. **mileage** - the number of miles the car has traveled since production
5. **engine** - car engine
6. **transmission** - type of the car's transmission
7. **drivetrain** - type of the car's drivetrain
8. **fuel_type** - type of fuel that the car consumes
9. **mpg** - the number of miles a car can travel using one gallon of fuel (miles per gallon)
10. **exterior_color** - car exterior color
11. **interior_color** - car interior color
12. **accidents_or_damage** - whether the car was involved in accidents
13. **one_owner** - whether the car was owned by one person
14. **personal_use_only** - whether the car was used only for personal purposes
15. **seller_name** - name of the seller
16. **seller_rating** - seller's rating
17. **driver_rating** - car rating given by drivers
18. **driver_reviews_num** - the number of car reviews left by drivers
19. **price_drop** - price reduction from the initial price
20. **price** - car price

Number of Records: There are a total of 762,092 individual records.

Significant Records: Manufacturer, Model, Year, Colors

Significant Quantitative Values: Price, Price Drop, Number of Accidents

Research Questions:

1. Which manufacturer has the highest average sales price?
2. Does the number of accidents that a vehicle has been in affect the sales price?
3. Which type of fuel offers better mileage? What is the mileage difference between cars manufactured before and after 2015?
4. How is the average price of cars used for personal use different from cars that are not used only for personal use?
5. Do the cars that were used only as personal vehicles have better mileage than others?
6. Which car model has the greatest price drop, and which one has the least? Does the car's color affect the price drop?