Car Price Prediction

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Summary

- Problem Statement
- Existing System
- Problem Solution
- Attributes in this dataset
- Tools Used In this project
- Visualization
- Conclusion

Problem Statement

We Are going to predict The car Prices of Used Cars We have Several Informations About those used cars and this particular dataset contains car brand and,what is the year of that particular model and at what price that particular car sold and present price of the car and the kilometers driven fuel type whether it is it runs on petrol or diesel kind of things seller type whether the seller is an individual or dealer in the in the transmission whether the gear system is automated or manual then number of owners of that particular car we have these data features using these we are going to train our machine Learning to predict the correct price.

Existing System

Cars of a particular make, model, year, and set of features start out with a price set by the manufacturer. As they age and are resold as used, they are subject to supply-and-demand pricing for their particular set of features, in addition to their unique history. The more this sets them apart from comparable cars, the harder they become to evaluate with traditional methods.

Problem Solution

- This project To provide a model that can be provide a used car's price using machine learning.
- With this model,car buyers will determine a particular used car's responsible price given certain conditions
- In this sense,pepoles are less likely to buy an overpriced car.Meanwhile ,a reasonable price can also be beneficial for sellers.
- both sellers and buyers can save much time and effort selling or searching second hand cars in market

Attributes in this dataset

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine	max_power	torque	seats
0	Maruti Swift Dzire VDI	2014	450000	145500	Diesel	Individual	Manual	First Owner	23.4 kmpl	1248 CC	74 bhp	190Nm@ 2000rpm	5.0
1	Skoda Rapid 1.5 TDI Ambition	2014	370000	120000	Diesel	Individual	Manual	Second Owner	21.14 kmpl	1498 CC	103.52 bhp	250Nm@ 1500-2500rpm	5.0
2	Honda City 2017-2020 EXi	2006	158000	140000	Petrol	Individual	Manual	Third Owner	17.7 kmpl	1497 CC	78 bhp	12.7@ 2,700(kgm@ rpm)	5.0
3	Hyundai i20 Sportz Diesel	2010	225000	127000	Diesel	Individual	Manual	First Owner	23.0 kmpl	1396 CC	90 bhp	22.4 kgm at 1750-2750rpm	5.0
4	Maruti Swift VXI BSIII	2007	130000	120000	Petrol	Individual	Manual	First Owner	16.1 kmpl	1298 CC	88.2 bhp	11.5@ 4,500(kgm@ rpm)	5.0

Tools used In this project

- ❖ Collecting data set for car prediction -Kaggle
- ❖ Data pre processing- Using EDA(Exploratory data analysis)
- ❖ Split data in two types one is training data another one is testing data
- ❖ Regression model (linear Regression,Random Forest ,Decision Tree,Extra tree regressor,XGB regressor)
- ❖ After these four steps once we feed new data to our machine learning model operating the data and it predict the car price and which it can be sold

Visualization
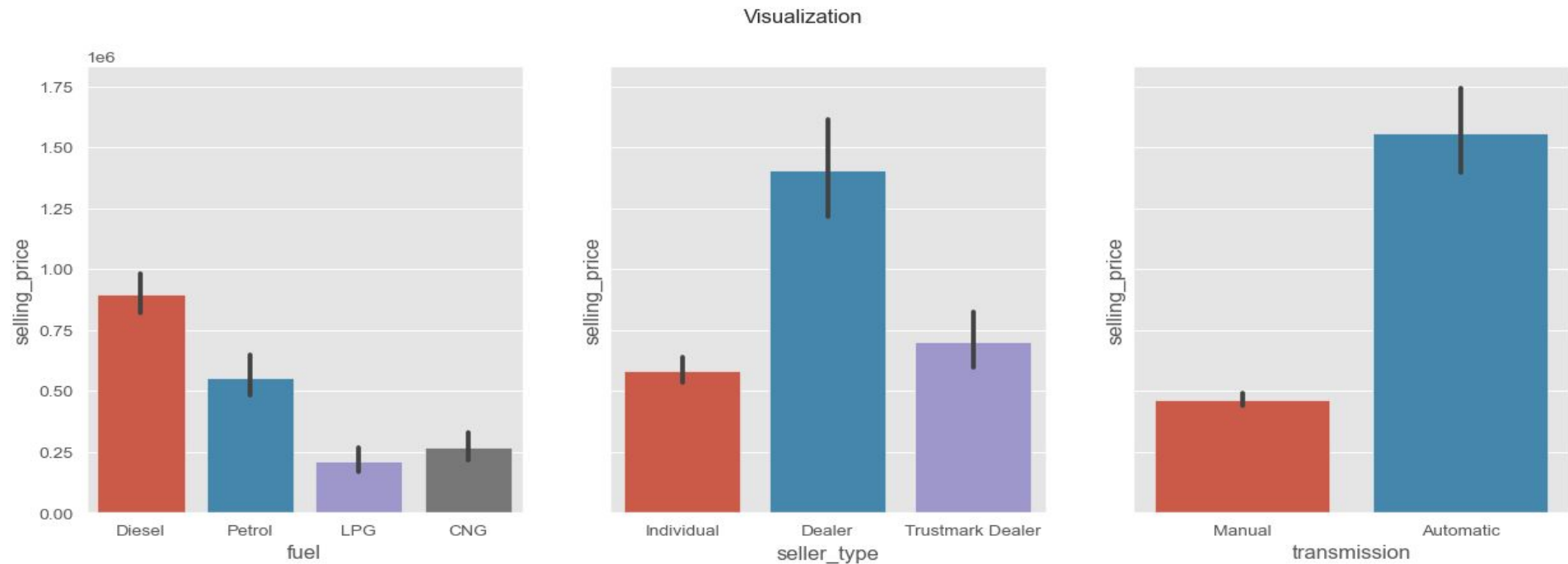
Conclusion

The increased prices of new cars and the financial incapability of the customers to buy them, Used Car sales are on a global increase. Therefore, there is need for a Used Car Price Prediction system which effectively determines the worthiness of the car using a variety of features.Here we Successfully create a Machine learning Based Car price Prediction System.