Used Car Price Prediction

Submitted by:

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ACKNOWLEDGMENT

In used car price prediction project, I collected data from various online website but most of the data I fetched from cars24 because this website has more used cars and data is accurate without any null missing value rest of website like – olx and Car trade, this website has used car listing but not more. I took help from google in some steps. I scrapped data from these website with the help of Selenium web driver.

INTRODUCTION

- ## Business Problem Framing

  As the market of used car is increasing gradually, there are lot of big car market players in the markets as well as small and local vendor. If we can google the used car, we will find thousand of website and thousands of physical stores. Indian market is going very flexible with used car and even small town is the best market for used car as they will buy those used car which is banned in big metro cities. So, when the market is too big, we need to set some parameter which will help in prediction of used cars. This will also help to seller as well as buyer.

- ## Conceptual Background of the Domain Problem

  This project is directly linked with sales, marketing and automobile domain. The problem we are helping to predict the used car price because all the automobile companies have their policies to sell new cars but no company or vendor has any model or any policies to setup the price of used cars, which make difference between in pricing of used cars.

- ## Review of Literature

  For this used car prediction model, I did some research on google to check how they predict the car price but did not get any solid proof as every website has some difference in pricing. As I go deep with this model the difference on price is remain same but we can reduce this difference with our model.

- ## Motivation for the Problem Undertaken

  Describe your objective behind to make this project, this domain and what is the motivation behind.

Analytical Problem Framing

- Mathematical/ Analytical Modeling of the Problem

  Describe the mathematical, statistical and analytics modelling done during this project along with the proper justification.

- Data Sources and their formats

  What are the data sources, their origins, their formats and other details that you find necessary? They can be described here. Provide a proper data description. You can also add a snapshot of the data.

- Data Preprocessing Done

  What were the steps followed for the cleaning of the data? What were the assumptions done and what were the next actions steps over that?

- Data Inputs- Logic- Output Relationships

Describe the relationship behind the data input, its format, the logic in between and the output. Describe how the input affects the output.

- State the set of assumptions (if any) related to the problem under consideration

  Here, you can describe any presumptions taken by you.

- Hardware and Software Requirements and Tools Used

  Listing down the hardware and software requirements along with the tools, libraries and packages used. Describe all the software tools used along with a detailed description of tasks done with those tools.

Model/s Development and Evaluation

- Identification of possible problem-solving approaches (methods)

  Describe the approaches you followed, both statistical and analytical, for solving of this problem.

- Testing of Identified Approaches (Algorithms)

  Listing down all the algorithms used for the training and testing.

- Run and Evaluate selected models

  Describe all the algorithms used along with the snapshot of their code and what were the results observed over different evaluation metrics.

- Key Metrics for success in solving problem under consideration

What were the key metrics used along with justification for using it? You may also include statistical metrics used if any.

- Visualizations

  Mention all the plots made along with their pictures and what were the inferences and observations obtained from those. Describe them in detail.

  If different platforms were used, mention that as well.

- Interpretation of the Results

  Give a summary of what results were interpreted from the visualizations, preprocessing and modelling.

CONCLUSION

- Key Findings and Conclusions of the Study

  Describe the key findings, inferences, observations from the whole problem.

- Learning Outcomes of the Study in respect of Data Science

  List down your learnings obtained about the power of visualization, data cleaning and various algorithms used. You can describe which algorithm works best in which situation and what challenges you faced while working on this project and how did you overcome that.

- Limitations of this work and Scope for Future Work

  What are the limitations of this solution provided, the future scope? What all steps/techniques can be followed to further extend this study and improve the results.