USED-CARS PRICE PREDICTION

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INTRODUCTION

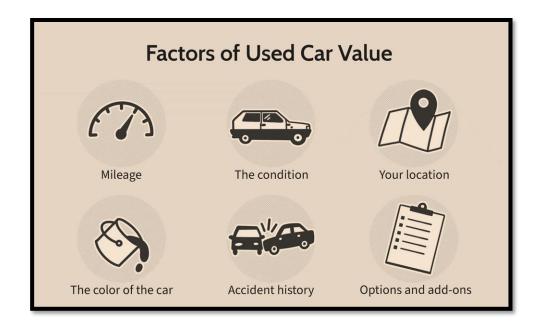
- WE ARE TRYING TO PREDICT THE PRICE OF USED CARS BASED ON THEIR FEATURES. AS IT WOULD HELP THE PEOPLE TO DECIDE WHETHER THE USED CAR IS WORTH THE POSTED PRICE BY DIFFERENT ONLINE USED CAR-SITES. IT WOULD ALSO HELP PEOPLE WHEN THEY PLAN SELLING THEIR CARS.
- **PROBLEM STATEMENT**: PREDICTING THE PRICE OF USED CARS WITH THE GIVEN FEATURES.
- > THREE STEP APPROACH TO UNDERSTAND THE PROBLEM AND THE APPROACHES USED:
- > STEP-1: WHAT IS THE PRICE OF A CAR WITH ITS FEATURES.
- > STEP-2: IT WOULD HELP PEOPLE TO DETERMINE THE BEST PRICE BY COMPARING THE PRICES AGAINST DIFFERENT ONLINE USED CAR-SITES.
- > STEP-3: THE PROBLEM IS SOLVED USING MACHINE LEARNING TECHNIQUES/MODELS.

ABSTRACT

CARS ARE BEING SOLD MORE THAN EVER. DEVELOPING COUNTRIES ADOPT THE LEASE CULTURE INSTEAD OF BUYING A NEW CAR DUE TO AFFORDABILITY. THEREFORE, THE RISE OF USED CARS SALES IS EXPONENTIALLY INCREASING. CAR SELLERS SOMETIMES TAKE ADVANTAGE OF THIS SCENARIO BY LISTING UNREALISTIC PRICES OWING TO THE DEMAND. THEREFORE, ARISES A NEED FOR A MODEL THAT CAN ASSIGN A PRICE FOR A VEHICLE BY EVALUATING ITS FEATURES TAKING THE PRICES OF OTHER CARS INTO CONSIDERATION, SUPERVISED LEARNING METHOD NAMELY RANDOM FOREST IS USED TO PREDICT THE PRICES OF USED CARS.

DATASETS

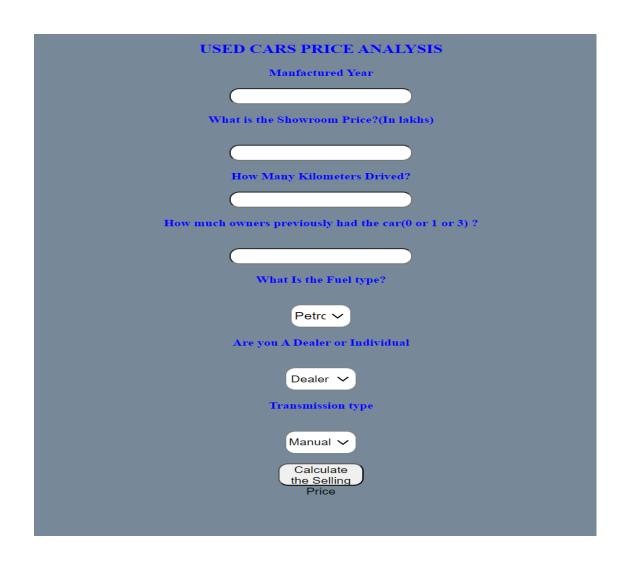
- WE WILL TAKE THE DATASET FROM KAGGLE FOR MANUAL PARAMETERS LIKE:
- **YEAR**: THE YEAR OF THE CAR RELEASED INTO MARKET.
- **MODEL**: THE TYPE OF THE MODEL OF CAR.
- FUEL TYPE: THE FUEL THAT CAN BE USED IN THE CAR.
- **KILOMETERS**: HOW MANY KILOMETERS DRIVED.
- **TRANSMISSION**: MANUAL/AUTOMATIC.



METHODOLOGY

- 1. GATHER CAR DATA.
- 2. CLEAN AND ORGANIZE THE DATA.
- 3. IDENTIFY IMPORTANT FACTORS.
- 4. ANALYZE RELATIONSHIPS BETWEEN FACTORS AND PRICES.
- 5. BUILD A MODEL TO PREDICT PRICES.
- 6. EVALUATE MODEL PERFORMANCE.
- 7. USE THE MODEL TO ESTIMATE CAR PRICES.

OUTPUT



CONCLUSION

- IN CONCLUSION, PREDICTING USED CAR PRICES CAN BE A CHALLENGING TASK AS IT DEPENDS ON SEVERAL FACTORS SUCH AS AGE, MILEAGE, CONDITION, MAKE, MODEL, AND LOCATION OF THE CAR.
- IT IS ESSENTIAL TO CONSIDER THE SPECIFIC FEATURES AND ATTRIBUTES OF EACH CAR AND TAKE INTO ACCOUNT FACTORS SUCH AS MARKET TRENDS, ECONOMIC CONDITIONS, AND CONSUMER PREFERENCES TO MAKE ACCURATE PRICE PREDICTIONS.
- IT IS IMPORTANT TO CONSIDER OTHER FACTORS SUCH AS THE OVERALL CONDITION OF THE CAR, ITS MAINTENANCE HISTORY, AND ANY POTENTIAL ISSUES OR REPAIRS THAT MAY BE NEEDED.