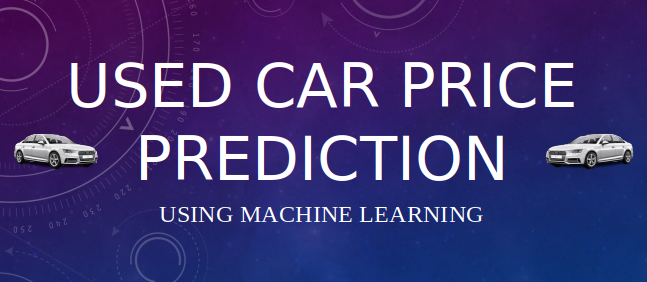
**Car Price Prediction**

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**Description:** With the Covid 19 impact in the market, we have seen lot of changes in the car market. Now some cars are in demand hence making them costly and some are not in demand hence cheaper. One of our clients works with small traders, who sell used cars. With the change in market due to Covid 19 impact, our client is facing problems with their previous car price valuation machine learning models. So, they are looking for new machine learning models from new data. We have to make car price valuation model.

**Approach:**

* We scrape data from multiple site example car dhekho, olx etc.
* Import important library.
* Checking for null value and we found there is null value in our data set.
* To visualize the missing value, we plot graph using Klib library.
* We look information of our data set.
* Categorical data into float.
* Handling null value, fill with mean and mode.
* We do some feature engineering.
* Perform data analysis using types of graphs.
* Encode categorical data using dummy.
* Split data into feature and target and do standardization on features.
* Before going for model building we split data into train and test.
* We start model building we use bagging over algorithms.
* We use Decision Tree, XGBoost, Random Forest, KNeighbors, AdaBoost, Linear Regression and for evaluation we use r2 and RMSE.
* We do hyperparameter on XGBoost.
* We save our model with pickle file.
* We predict car price.
* Finally, we save prediction into csv file.

**Technology:** Python, Machine Learning, Pandas, Numpy, Matplotlib, Seaborn, Scikit-Learn, Pickle,

Decision Tree, XGBoost, Random Forest, KNeighbors, AdaBoost, Linear Regression and For

Evaluation we use R2 and RMSE.

**Achievement:** We do build bagging over XGBoost and perform hypermeter tuning on it. We achieve 94% accuracy score. For evaluation we use RMSE.