**Car Popularity Prediction: A Machine Learning**

**Approach**

**ABSTRACT:**

Today is a world of technology with a foreseen future of a machine reacting and thinking same as human. In this process of emerging Artificial Intelligence, Machine Learning, Knowledge Engineering, Deep Learning plays an essential role. In this paper, the problem is identified as regression or classification problem and here we have solved a real world problem of popularity prediction of a car company using machine learning approaches.

**EXISTING SYSTEM:**

Data was collected from <<petites announces>> found in daily newspapers such as L’Express and Le Defi . We made sure that all the data was collected in less than one month interval as time itself could have an appreciable impact on the price of cars. In Mauritius, seasonal patterns is not really a problem as this does not really affect the purchase or selling of cars. The following data was collected for each car: make, model, volume of cylinder (funnily this is usually considered same as horsepower in Mauritius), mileage in km, year of manufacture, paint colour, manual/automatic and price. Only cars which had their price listed were recorded.Because many of the columns were sparse they were removed. Thus, paint colour and manual/automatic features were removed. The data was then further tweaked to remove records in which either the age (year) or the cylinder volume was not available. Model was also removed as it would have been extremely difficult to get enough records for all the variety of car models that exist. Although data for mileage was sparse, it was kept as it is considered to be a key factor in determining the price of used cars

**DISADAVANTAGES:**

* The seasonal patterns is not really a problem as this does not really affect the purchase or selling of cars.
* Sales of cars does not contain any independent variable since various factors such as horse power; model, width, fuel type, height, price, city-mileage, highway-mileage and manufacturer are the various features that influence the sales

**PROPOSED SYSTEM:**

The focus of this technique is on creation of programs which can pick the data and learn from it by itself. Earlier, statistician and developers worked together for predicting success, failure, future etc. of any product. This process led to delay of the product development and launch. Maintenance of such product in the changing technology and data is also one of the major challenges.A problem with many output variables is referred to multivariate regression problem.

**ADAVANTAGES:**

* Machine learning made this process easier and faster.
* The Supervised learning algorithm can be applied to the past learned data to new data using labels so as to predict future events.

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

* System : Pentium Dual Core.
* Hard Disk : 500 GB.
* Monitor : 15’’ LED
* Input Devices : Keyboard, Mouse
* Ram : 1GB.

**SOFTWARE REQUIREMENTS:**

Operating system : Windows 7.

Coding Language : Python

Tool : PyCharm,VisualStudio Code

Database : MYSQL

**REFERENCE:**

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