

However, the method of being able to build a trustworthy market place with a fair value of the used car might become rather confusing and difficult. The traditional valuation methods mainly aim at using the subjective aspects of age, mileage, or the state of affairs that indeed may pose a risk and let in bias. The enigmatic nature of the used data cars that emerges in big volumes and varieties only brings the problem aggravates, so much so that it becomes too hard to pinpoint patterns which could be the most significant. This can disadvantage each client and dealer, leading to faulty valuations and unfair offers. Therefore, there is a critical need to develop robust predictive models capable of accurately forecasting the prices of secondhand vehicles, leveraging advanced data analysis techniques and intelligent machine learning algorithms (Chandak et al., 2019; Asghar et al., 2021).

### **1.3 Importance**

A sturdy and accurate used car pricing device powered by means of ML gives good sized blessings to numerous stakeholders:

- o Buyers: Gain self-assurance in buying selections by making sure pricing is truthful and keeping off overpriced motors.
- o Sellers: Optimize their list costs to attract capability buyers and reap faster sales without underselling their vehicle.
- o Financial institutions: Enhance mortgage threat evaluation and valuation accuracy for used vehicle financing.

### **1.4 Research Questions**

- What ML algorithms fine predict used automobile charges based totally on numerous information sources?
- Are boosting models more efficient in predicting the prices of used cars?



sign