## Group 2 Project 4 Elevator Pitch:

## Analyzing Used Car Price Trends

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**THE WHY**: Our objective is to capture the view of buyers' and sellers' perspectives on craigslist in the USA. We have acquired data that contains over 400,000 entries of data, with 26 columns examples including:

- Odometer: The mileage of the car
- Manufacturer: The make of the car that was purchased
- Car Model: The model of the car that was purchased
- Car Year: The year of the car that was purchased
- Price: The listed price of the car in USD

Our goal is to understand and identify any trends/patterns and correlations through means of graphing visuals in dashboard perspective, data model implementation and optimization via either a Python or Javascript model and incorporating machine learning integration. The results will be visually displayed to raise awareness and promote informed decision-making in the used car sales market for both buyers and sellers. Using machine learning models we will try and predict the listed price of a car given a list of relevant factors.

Sample questions to guide our research:

- 1) What are the most popular models and makes?
- 2) Which season (or months) are the most used cars advertisements posted?
- 3) Does day of the month affect listing price? (Do people tend to sell cars earlier/mid/later in the month, helps buyers know the best time to look for cars.)
- 4) Which model and make are listed at the highest price on craigslist
- 5) Which states have the most listed cars?
- 6) Is there any relationship between car manufacturer, car model, car year with the price listed?

Initial Dataset used: <a href="https://www.kaggle.com/datasets/austinreese/craigslist-carstrucks-data">https://www.kaggle.com/datasets/austinreese/craigslist-carstrucks-data</a>

Napkin Drawing/ Ideas for Dashboard: