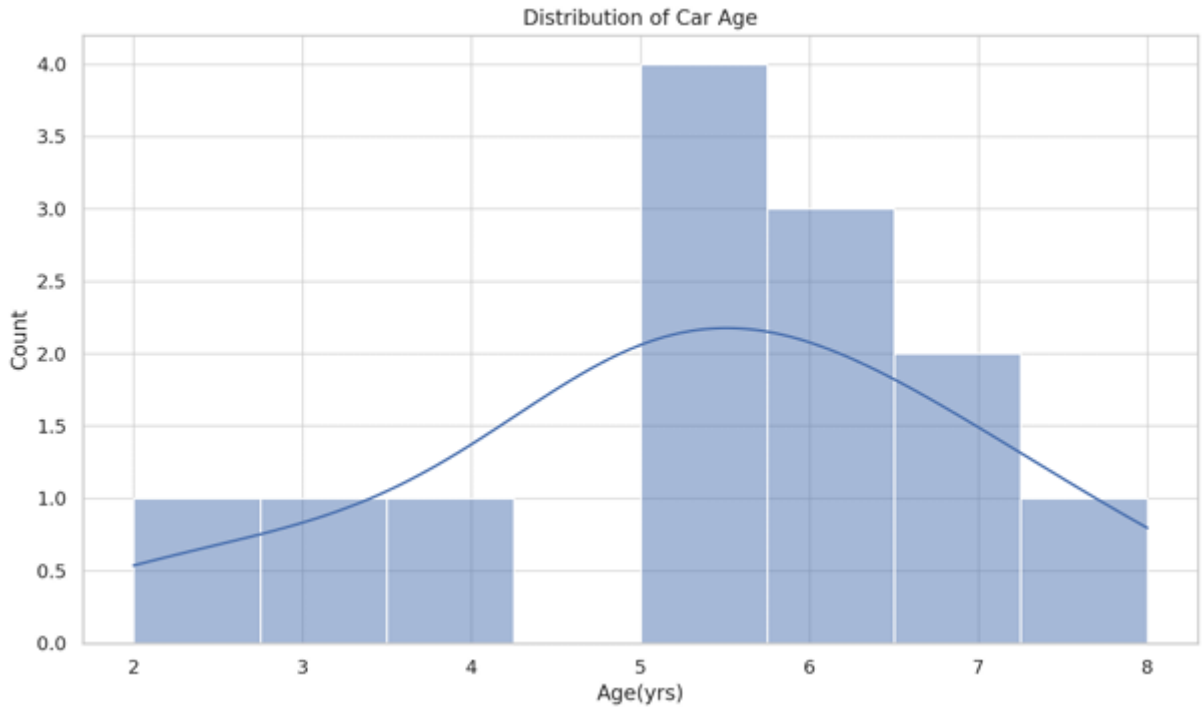
Exploratory Data Analysis Report

Dataset: Car Prices

Tools Used: Pandas, Seaborn, Matplotlib

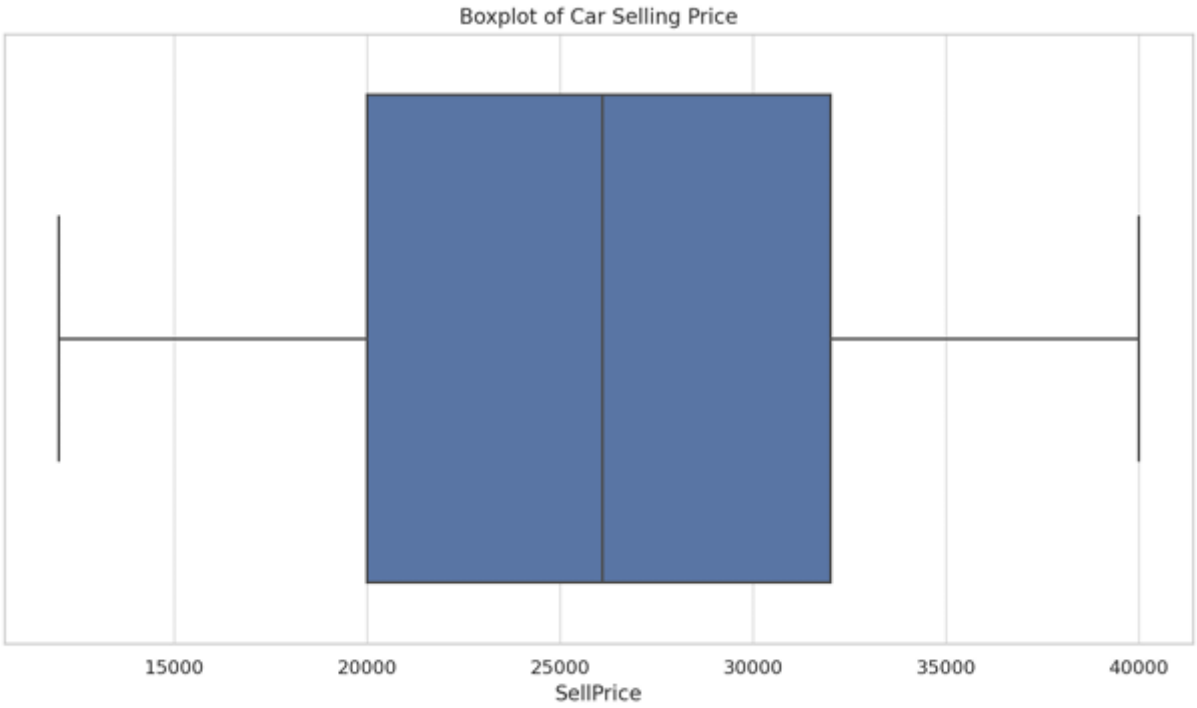
This report presents visual and statistical insights derived from the carprices.csv dataset.

Histogram:



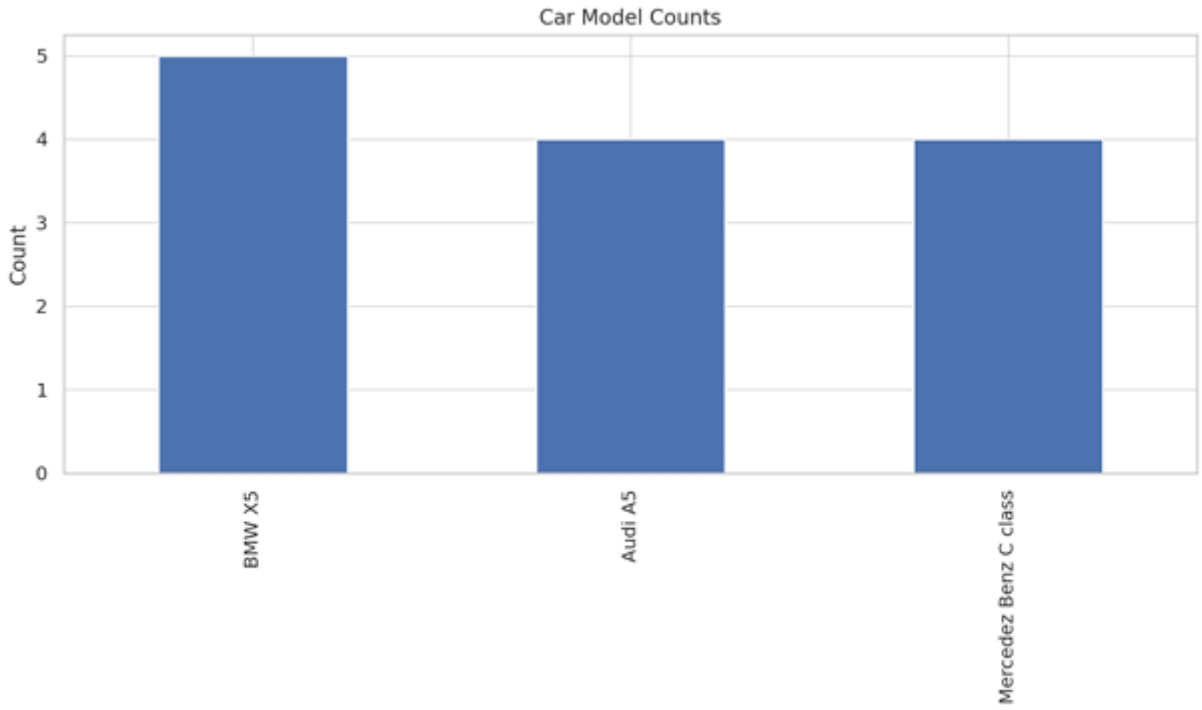
- Distribution of Car Age Most cars in the dataset are relatively new.
- The distribution is right-skewed, showing more cars with lower ages.

Boxplot:



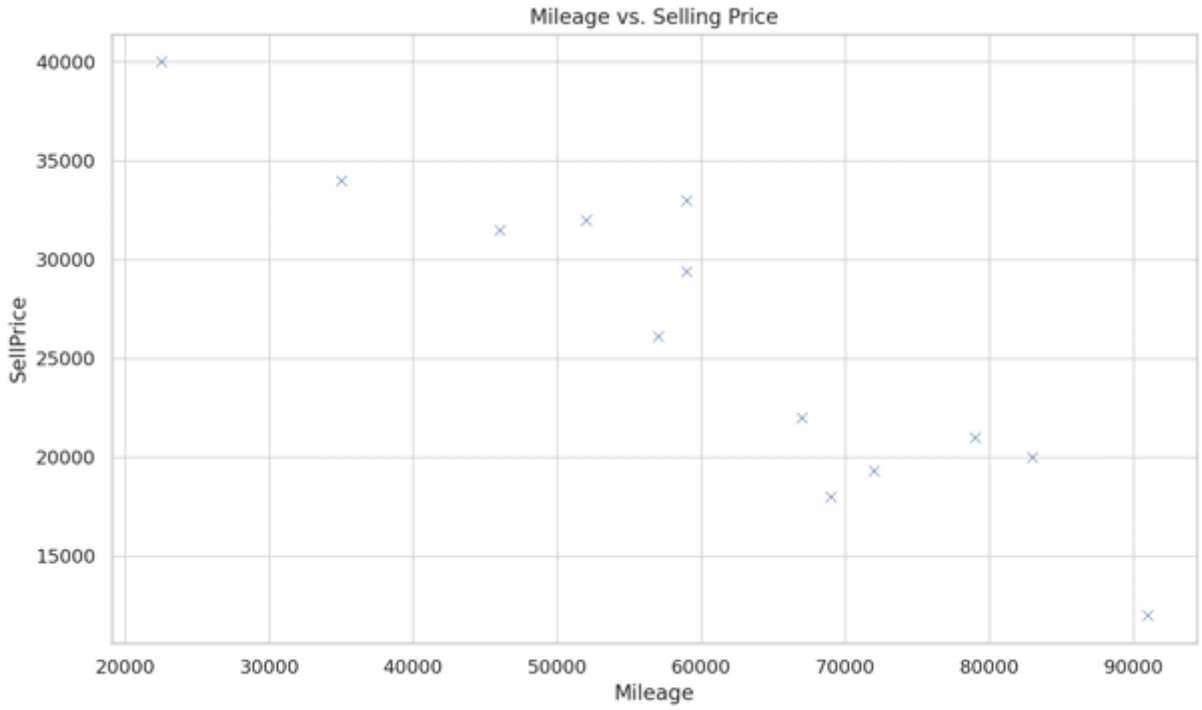
- Car Selling Price Selling prices show a few high-value outliers.
- Majority of cars are priced within a specific range.

Bar Chart:



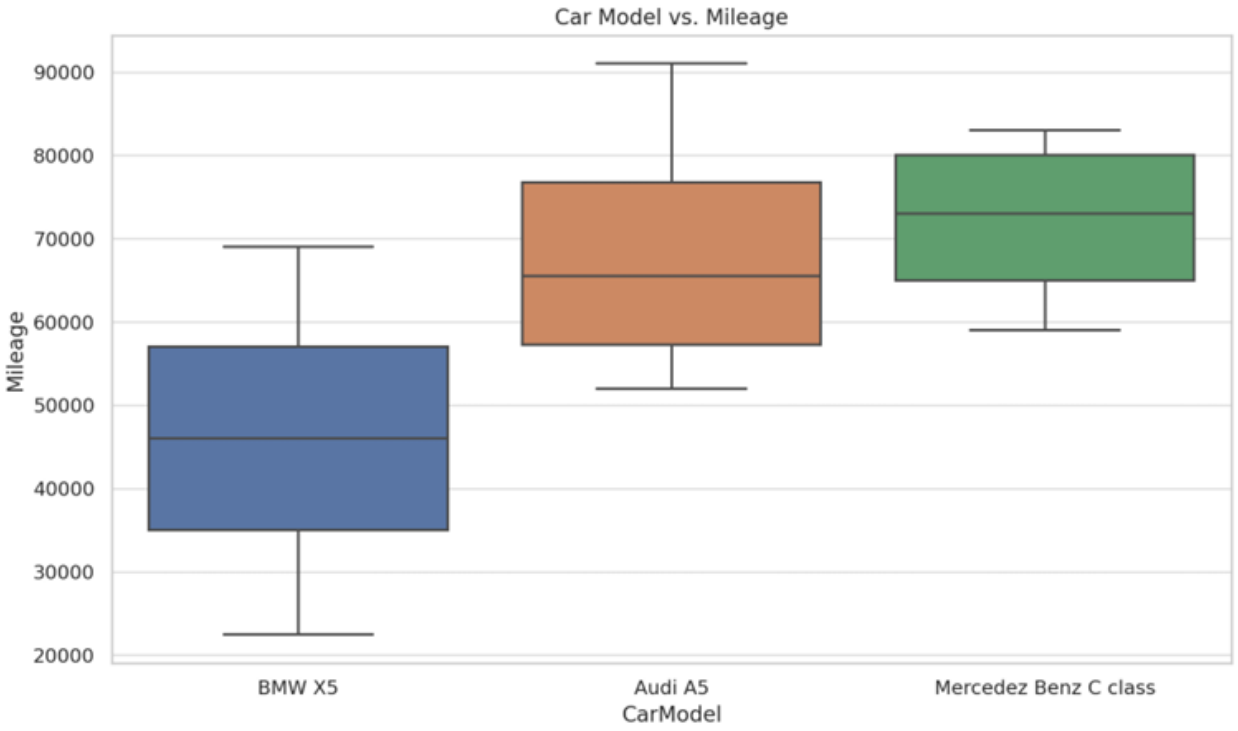
- Car Model Counts Among the three car models, one is more common in the dataset

Scatterplot:



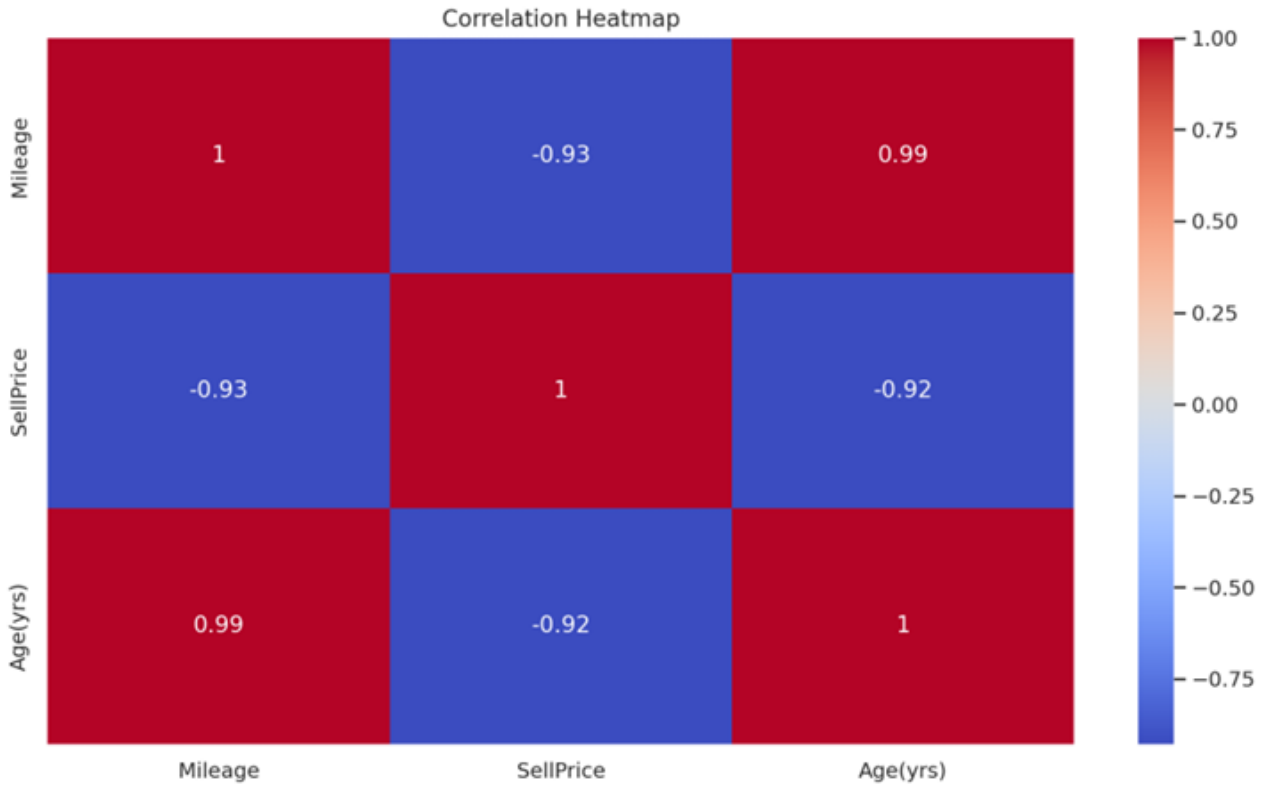
- Mileage vs. Sell Price There is a negative correlation.
- Cars with higher selling prices generally have lower mileage due to performance focus.

Boxplot:



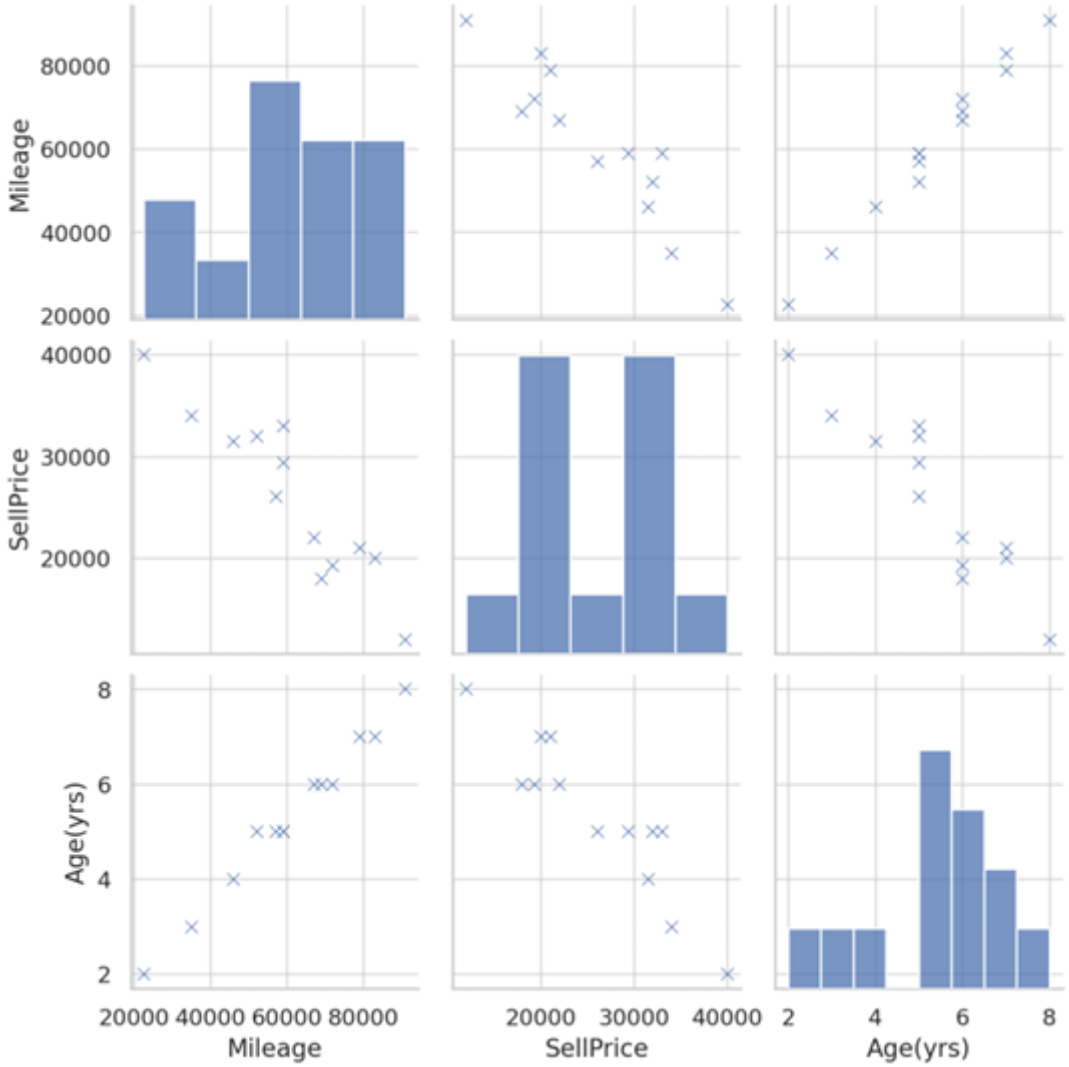
- Car Model vs. Mileage Different car models exhibit varying mileage characteristics.
- Some offer higher fuel efficiency.

Correlation Heatmap :



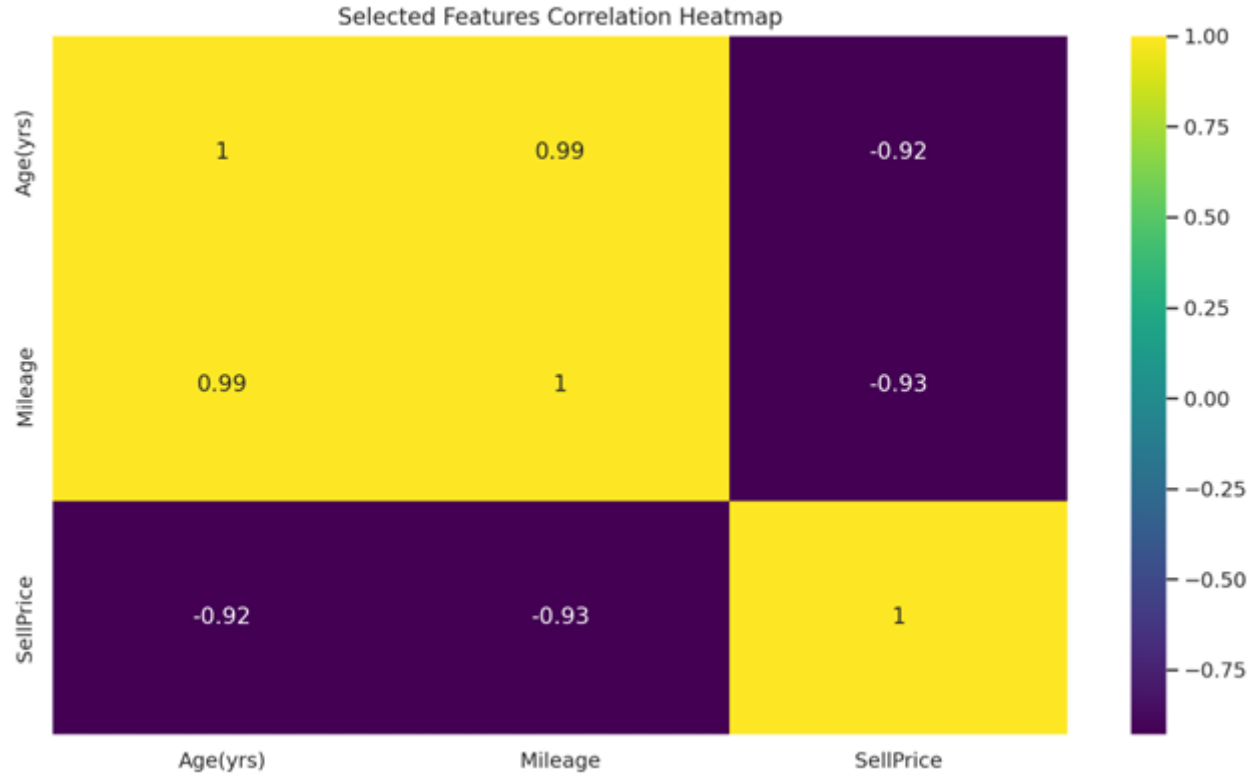
- Age and Mileage show positive correlation.
- Price shows negative correlation with both Age and Mileage.

Pairplot:



- Relationships Among Features All pairwise numeric relationships are visualized.
- Confirms the negative relationship of SellPrice with Age and Mileage.

Selective Features Heatmap(Advanced) :



- Focused correlation heatmap reiterates key relationships among Age, Mileage, and SellPrice