

EXPLORING THE SAUDI ARABIAN -RIYADH CAR MARKET



CONTENTS

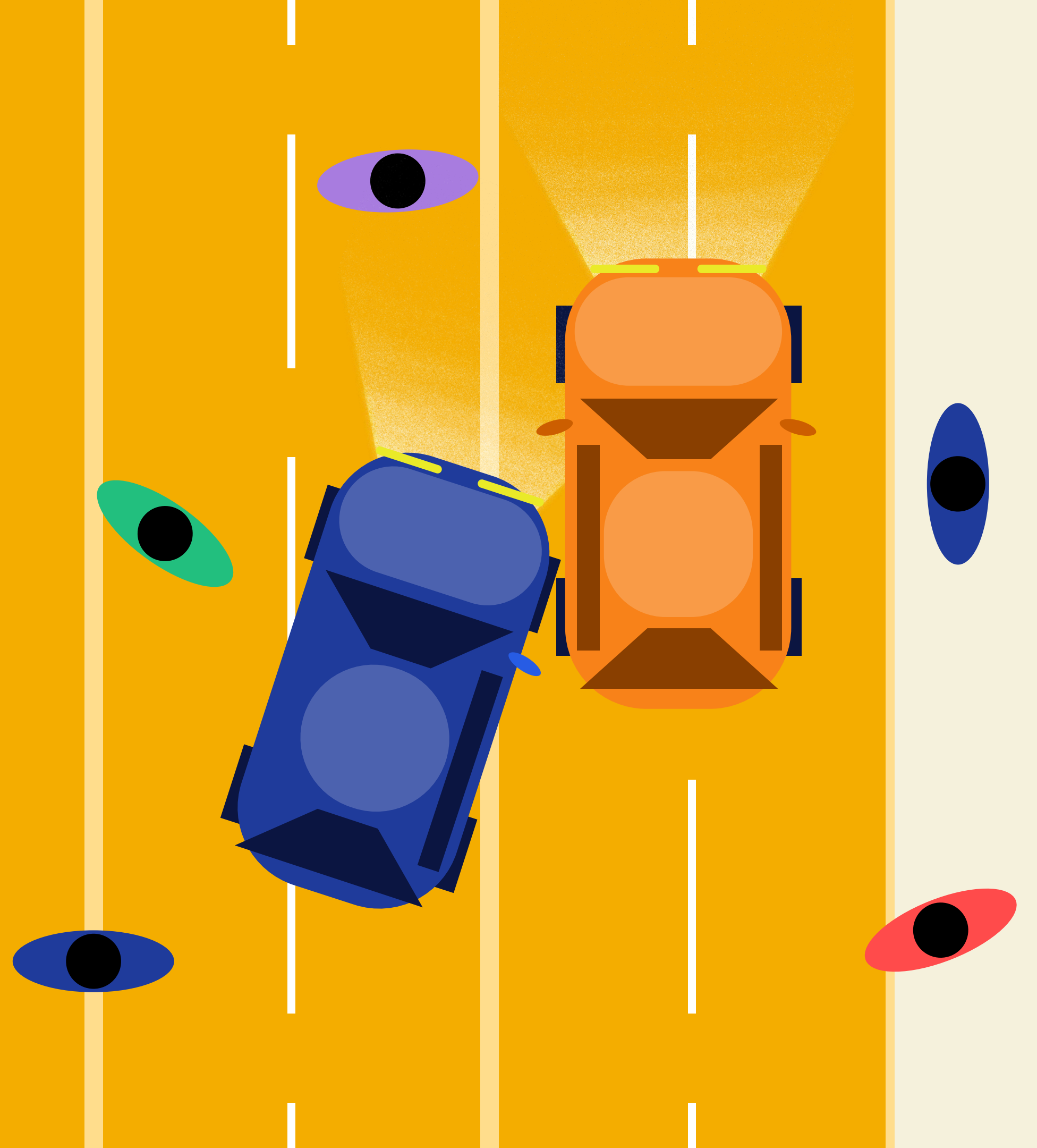
- 1 INTRODUCTION
- 2 GOALS
- 3 DATA OVERVIEW
- 4 TRANSMISSION TYPE POPULARITY BREAKDOWN
- 5 USED VS. NEW CAR MARKET
- 6 RELATIONSHIP BETWEEN MILEAGE AND PRICE
- 7 CAR PRICES BY TRANSMISSION TYPE
- 8 MEAN CAR PRICES BY COLOR
- 9 PREDICTING car prices in the next three years
- 10 SUMMARY
- 11 CONCLUSION





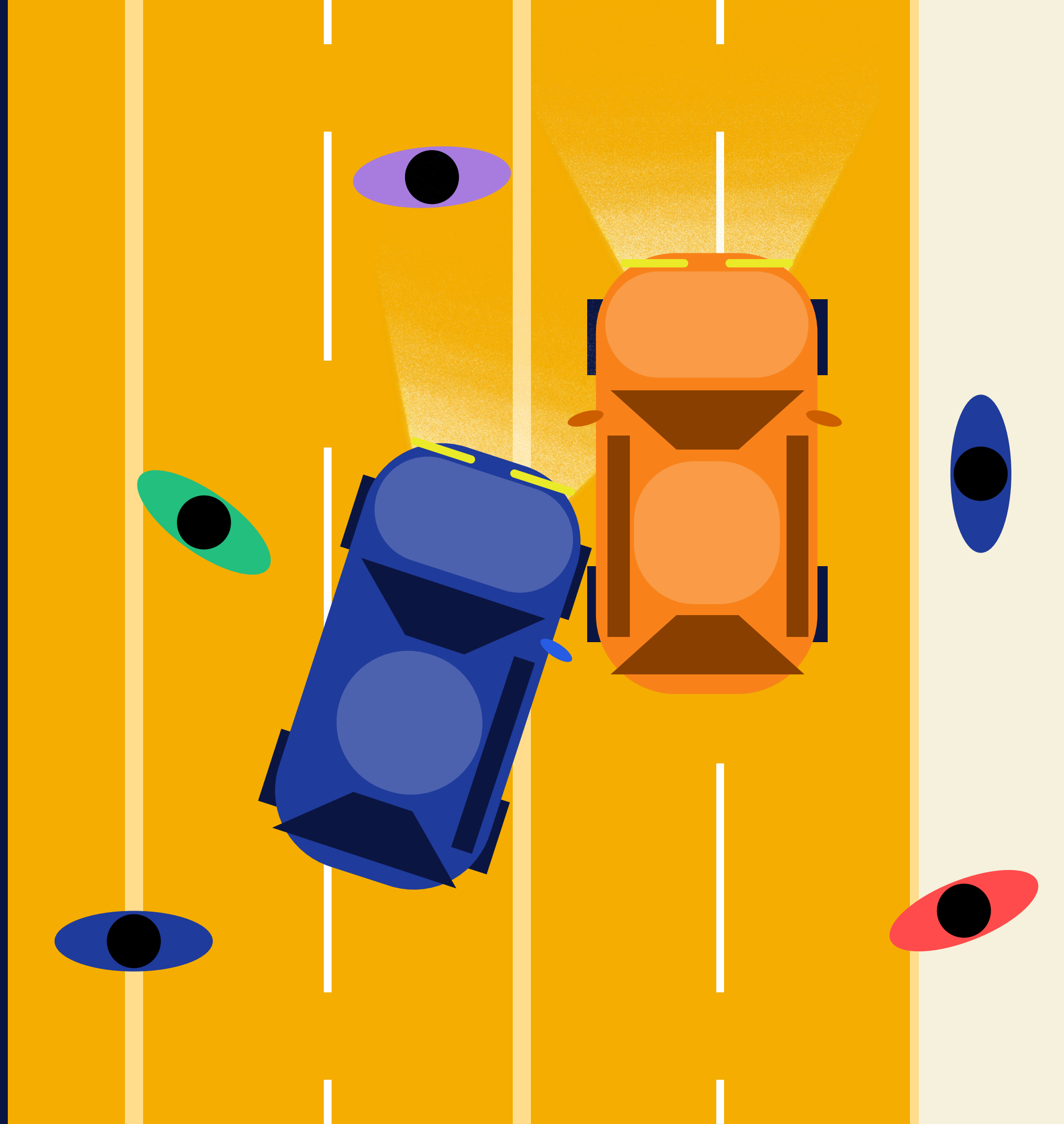
INTRODUCTION

- This project aims to analyze the used and new car market in Saudi Arabia using a comprehensive dataset of car listings.
- This can help consumers and dealers make better decisions.



GOALS:

- See how many used and new cars are in the market, and how they are different.
- Find the most popular car brands, models, fuel types, and transmission types.
- Analyze car prices and what factors affect them.
- See where in Saudi Arabia the cars are located.
- Provide useful insights that can help people in the car market.





DATA OVERVIEW

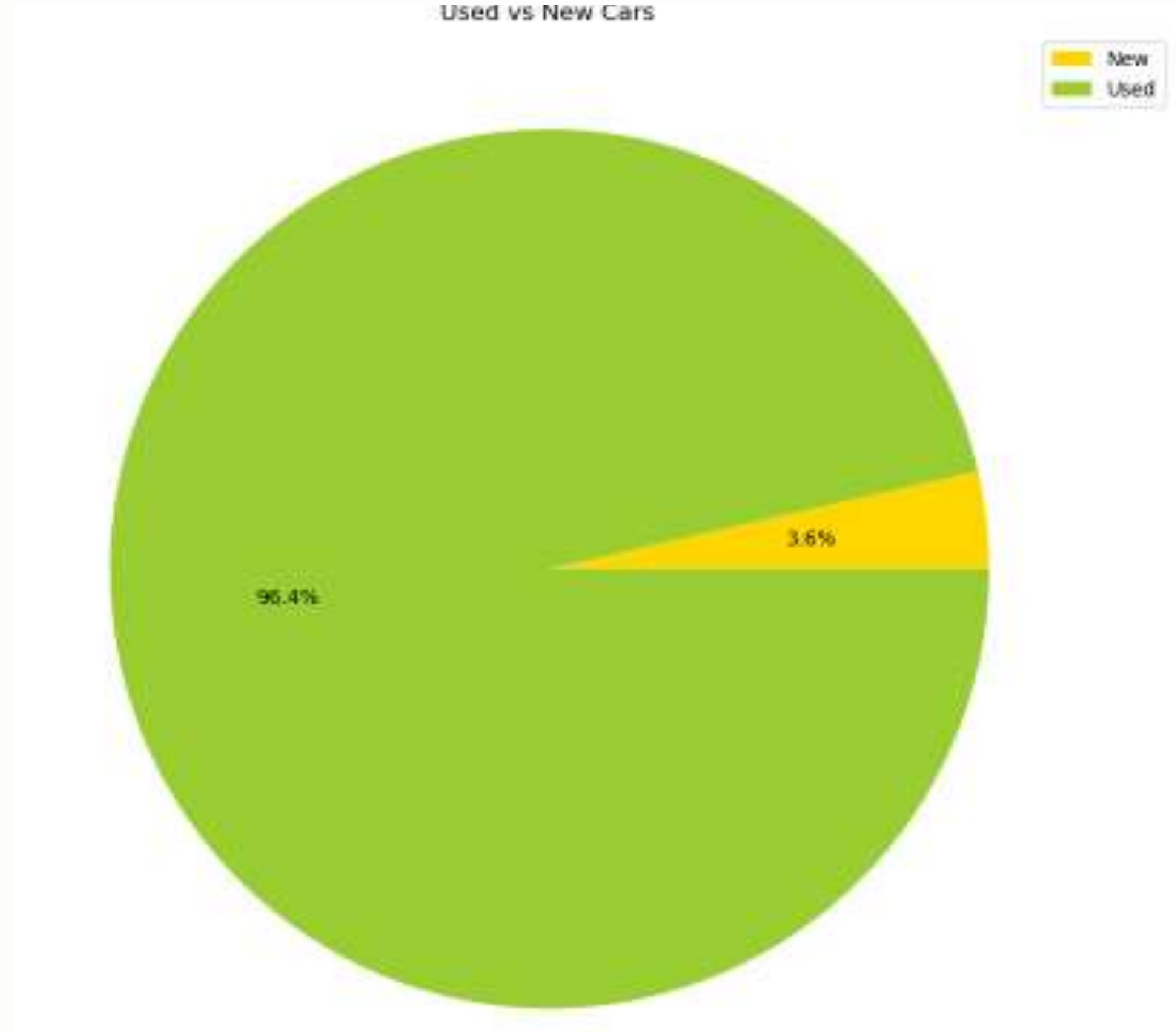


	A	B	C	D	E	F	G	H	I	J	K
1	city	car_maker	model	year	condition	kilometers	transmission	fuel	color	pay_method	price
2	Al Riyadh	Toyota	Rush	2019	Used	14999.5	Automatic	Gasoline	White	Cash or Installments	58375
3	Al Riyadh	Kia	Carnival	2006	Used	0	Automatic	Gasoline	Grey	Cash Only	10000
4	Al Riyadh	Toyota	Camry	2014	Used	24999.5	Automatic	Gasoline	White	Installments Only	58375
5	Al Riyadh	Ford	Fusion	2010	Used	200000	Automatic	Gasoline	White	Cash Only	22425.4
6	Al Riyadh	Ford	Taurus	2018	Used	5000	Automatic	Gasoline	Grey	Cash Only	22425.4
7	Al Riyadh	Renault	Dokker Van	2016	Used	64999.5	Manual	Gasoline	White	Cash Only	20000
8	Al Riyadh	Toyota	Camry	2019	New	0	Automatic	Gasoline	White	Cash or Installments	98500
9	Al Riyadh	Ford	Fusion	2014	Used	104999.5	Automatic	Gasoline	Black	Cash Only	45000
10	Al Riyadh	Nissan	Patrol	2009	Used	200000	Manual	Gasoline	White	Cash Only	36000
11	Al Riyadh	Ford	Expedition	2014	Used	200000	Automatic	Gasoline	Black	Installments Only	2114
12	Al Riyadh	BMW	X5	2008	Used	200000	Automatic	Gasoline	Silver	Cash Only	25000
13	Al Riyadh	Cadillac	Escalade	2008	Used	174999.5	Automatic	Gasoline	Black	Cash or Installments	40000
14	Al Riyadh	Ford	Crown Victoria	2011	Used	144999.5	Automatic	Gasoline	Silver	Cash Only	23000
15	Al Riyadh	Toyota	Prado	2008	Used	200000	Automatic	Gasoline	White	Cash Only	58375
16	Al Riyadh	Toyota	Avalon	2008	Used	200000	Automatic	Gasoline	White	Cash Only	30000
17	Al Riyadh	Mazda	3	2013	Used	154999.5	Automatic	Gasoline	Green	Cash Only	16000
18	Al Riyadh	Ford	Explorer	2013	Used	194999.5	Automatic	Gasoline	Silver	Cash Only	42000
19	Al Riyadh	Kia	Opirus	2008	Used	5000	Automatic	Gasoline	Grey	Cash Only	10000
20	Al Riyadh	BMW	740	2007	Used	200000	Automatic	Gasoline	Black	Cash Only	62500
21	Al Riyadh	GMC	Envoy	2007	Used	200000	Automatic	Gasoline	White	Cash Only	22000
22	Al Riyadh	BMW	740	2007	Used	200000	Automatic	Gasoline	Black	Cash Only	62500
23	Al Riyadh	Renault	Symbol	2016	Used	44999.5	Automatic	Gasoline	Silver	Cash Only	12000



USED VS NEW CAR

We note that the majority of the database here is used cars. It is very likely that the data analyzes that I conducted are affected and influenced by used cars more than new ones.





TRANSMISSION TYPE POPULARITY BREAKDOWN





TOP 5 CAR MAKES AND MODELS:

1. BMW 740 (2007, Used)
2. BMW 730 (2014, Used)
3. Kia Rio (2015, Used)
4. Toyota Rush (2019, Used)
5. Toyota Prado (2008, Used)



1



3



5



2



4





5 LEAST POPULAR CAR MAKES AND MODELS:

- 1.- BMW 730 (2014, Used)
- 2.- Toyota Prado (2008, Used)
- 3.- Toyota Fortuner (2016, Used)
- 4.- Toyota Camry (2019, New)
- 5.- Toyota Camry (2014, Used)



1



3



5



2

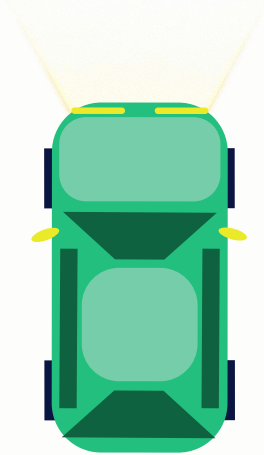


4

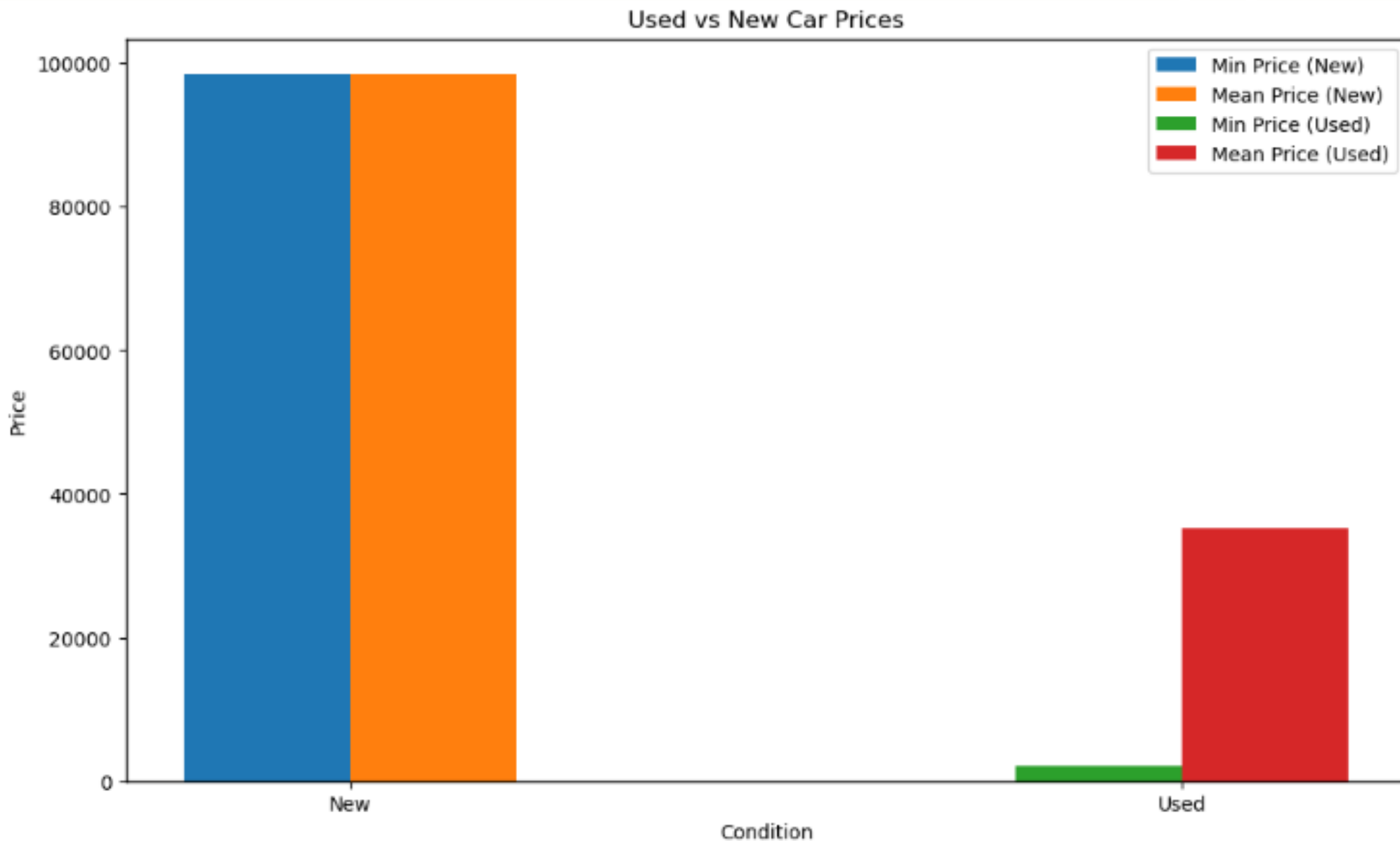




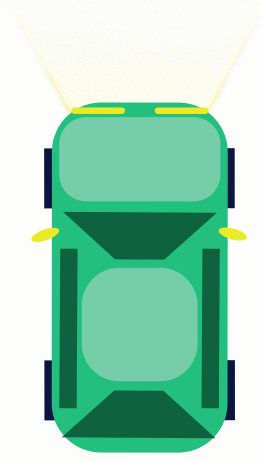
TRANSMISSION TYPE POPULARITY BREAKDOWN



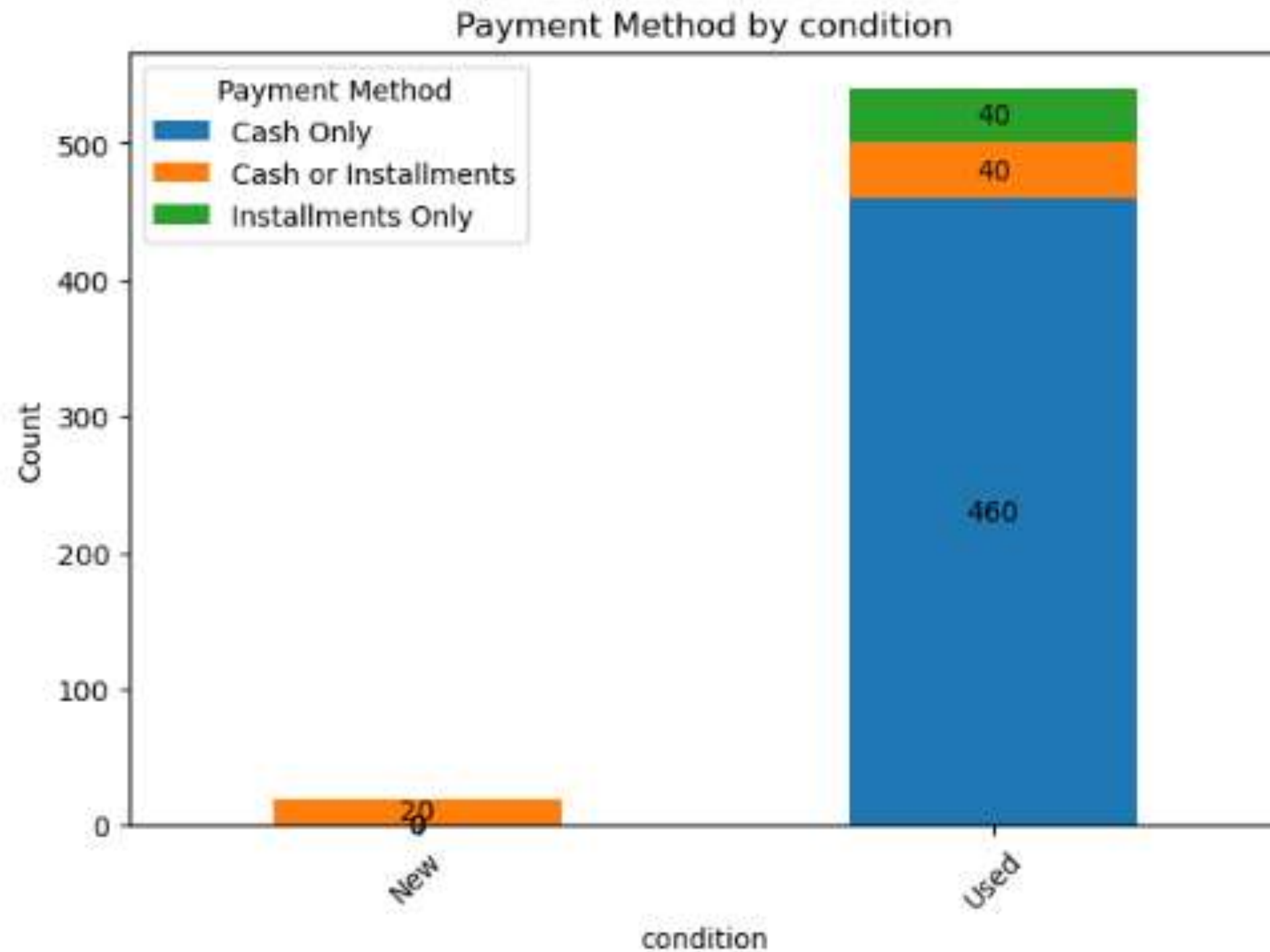
THE DIFFERENCE IN NEW VS. USED CAR PRICES



1. New cars are much more expensive than used cars.
 - The minimum price for a new car is around 80,000 SR, while the minimum price for a used car is only around 22,000 SR.
 - The average price for a new car is around 90,000SR, while the average price for a used car is only around 30,000SR.
2. The prices of used cars vary a lot more than new cars.
 - The difference between the minimum and average price for used cars is around 8,000 SR.
 - The difference between the minimum and average price for new cars is only around 10,000SR.
3. There is a big gap in prices between new and used cars.
 - The minimum price for a new car (80,000 SR) is over 3 times higher than the minimum price for a used car (22,000 SR).
 - The average price for a new car (90,000 SR) is almost 3 times higher than the average price for a used car (30,000 SR).
4. Buyers can save a lot of money by choosing a used car over a new one.
 - The minimum price difference between new and used cars is around 58,000 SR.
 - The average price difference between new and used cars is around 60,000 SR.



THE DIFFERENCE IN NEW VS. USED CAR PAYMENT METHOD



1. For "New" condition, the predominant payment method is "Cash or Installments" with a count of around 20.

2. For "used" condition, the payment methods "Cash only" is the most preferred method with a count of around 460.

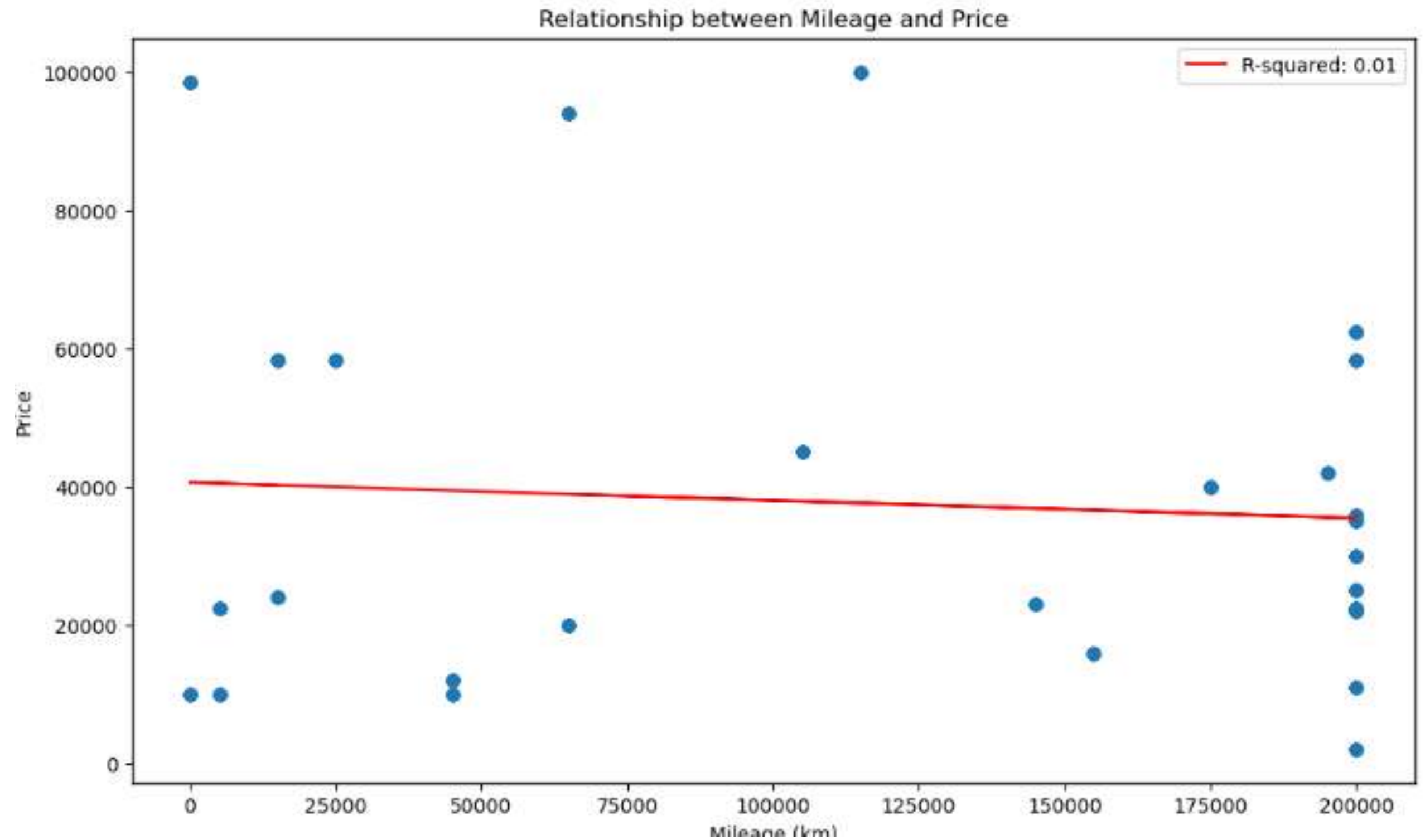


RELATIONSHIP BETWEEN MILEAGE AND PRICE



RELATIONSHIP BETWEEN MILEAGE AND PRICE

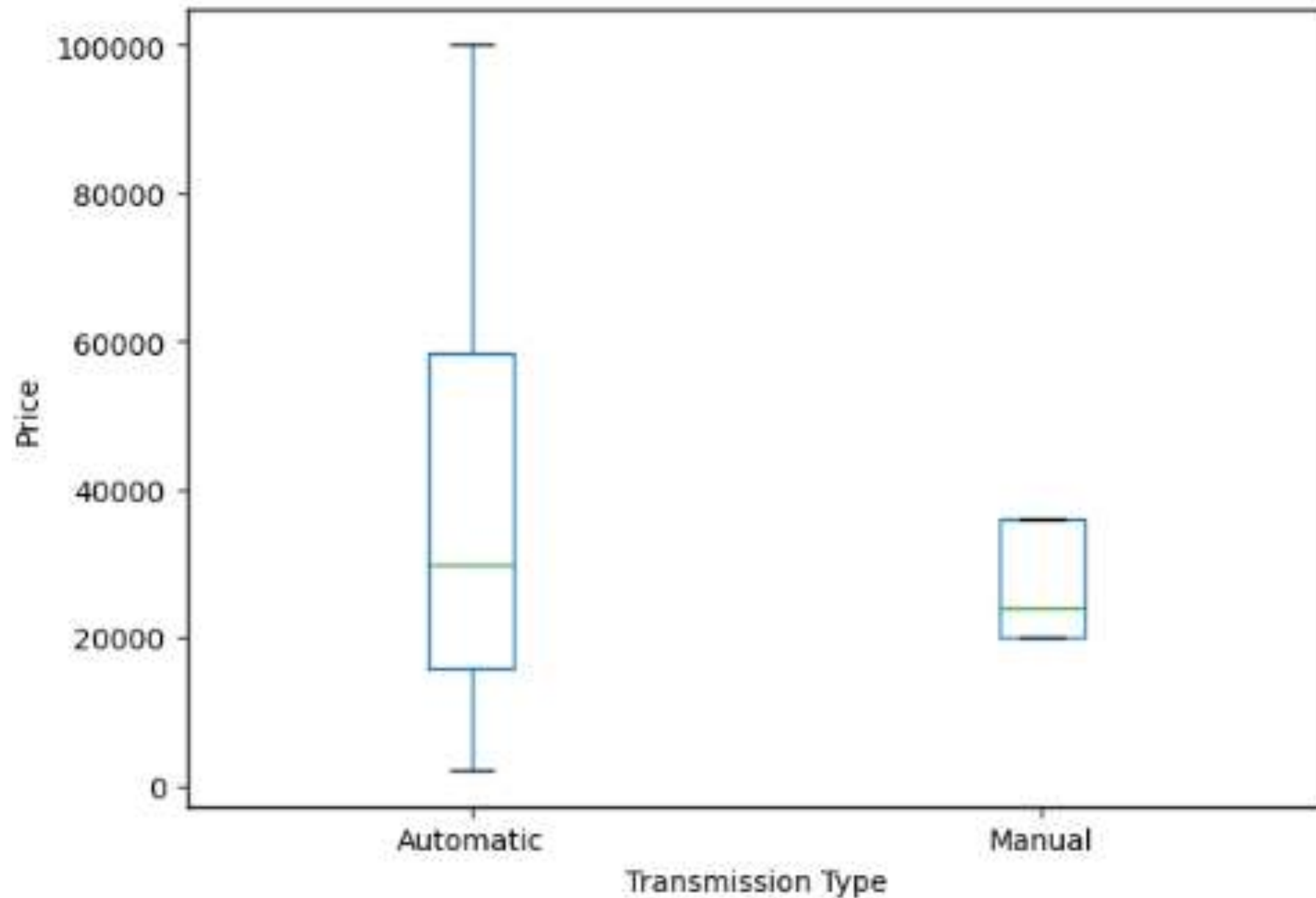
The graph shows a clear trend that as the mileage of a car increases, the price generally decreases. This inverse relationship between mileage and price



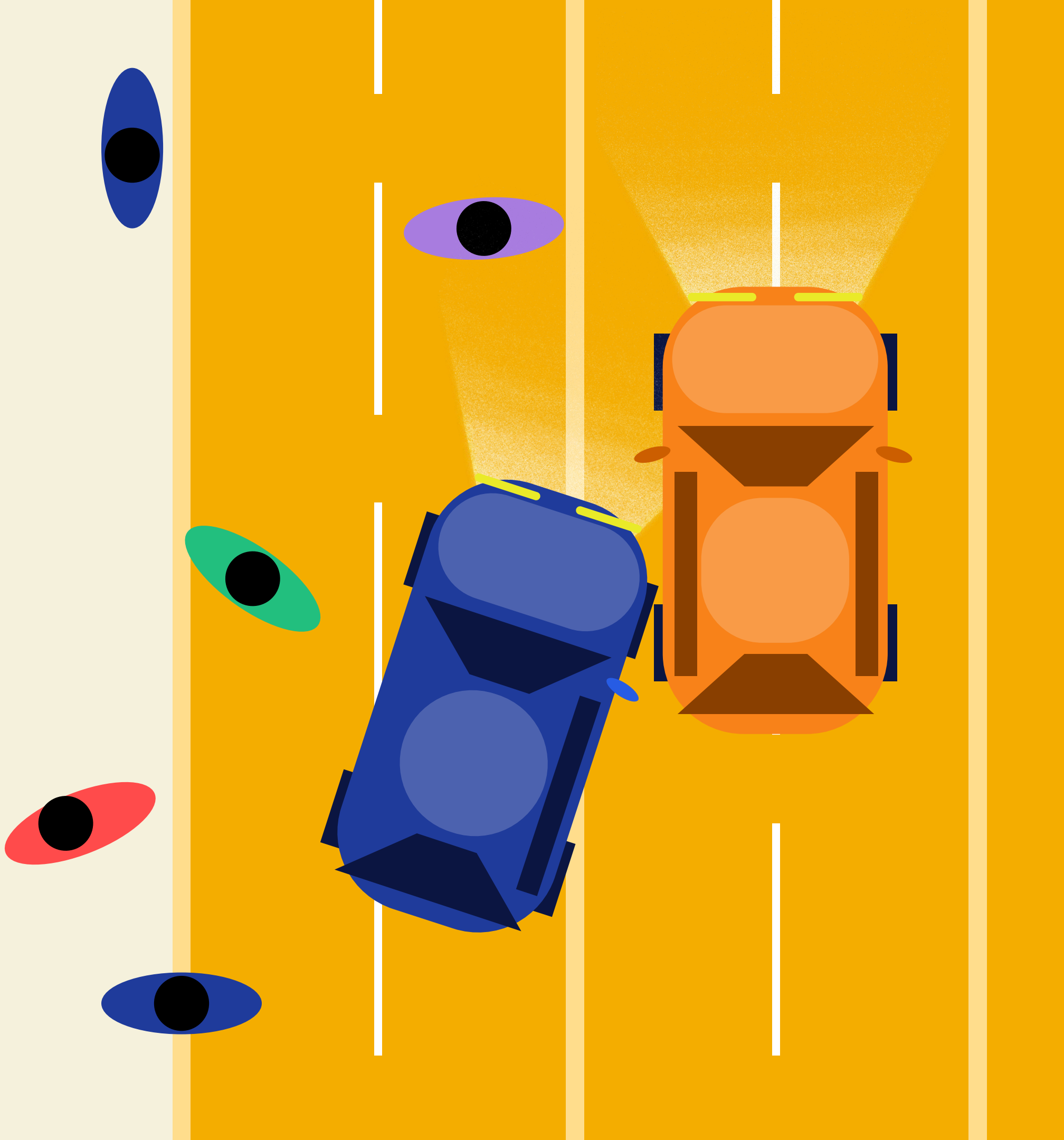
CAR PRICES BY TRANSMISSION TYPE



Boxplot grouped by transmission
Car Prices by Transmission Type



The median car price for Automatic transmission cars is around 75,000 SR, significantly higher than the median price of around 25,000 SR for Manual transmission cars.

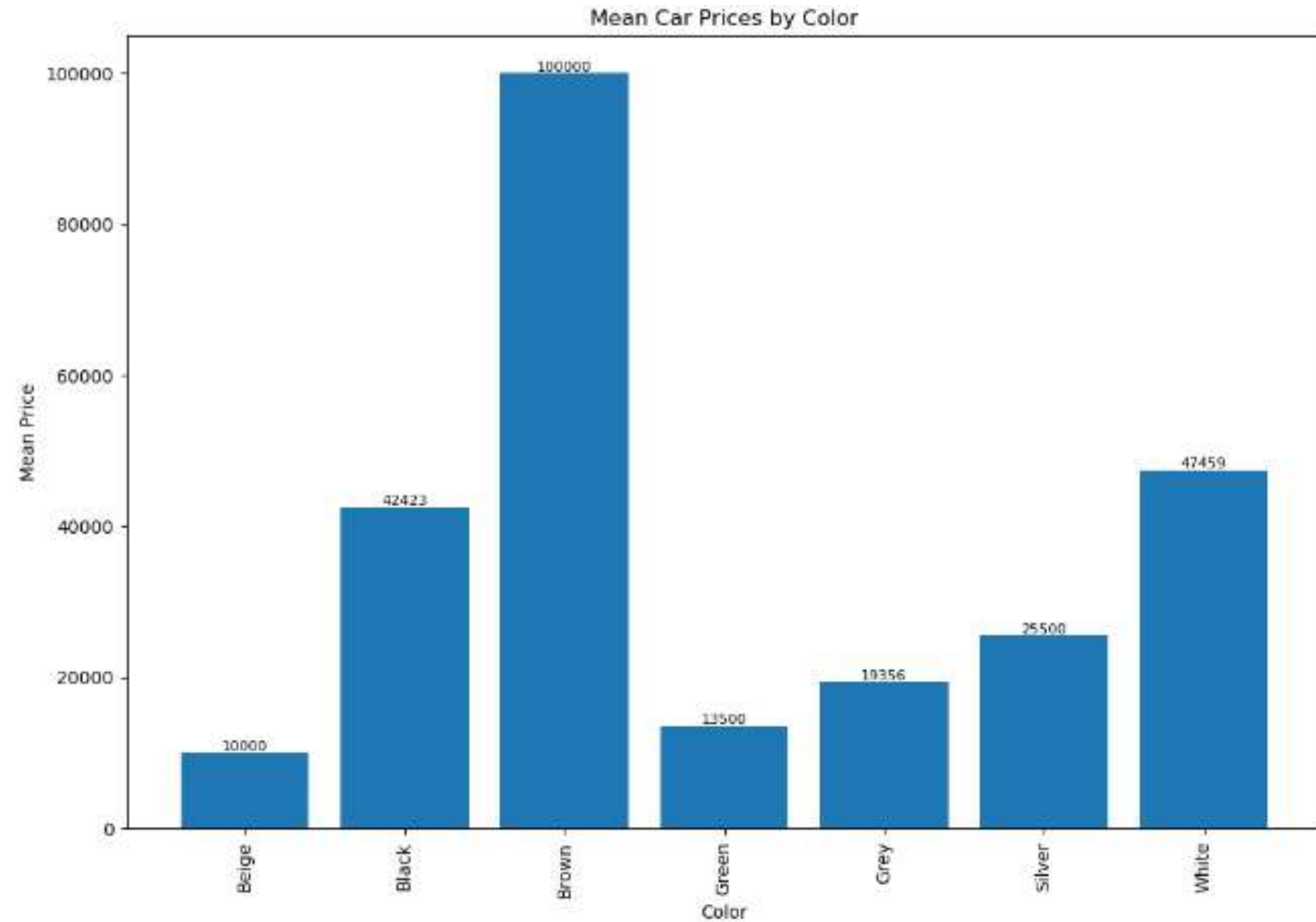


MEAN CAR PRICES BY COLOR

MEAN CAR PRICES BY COLOR



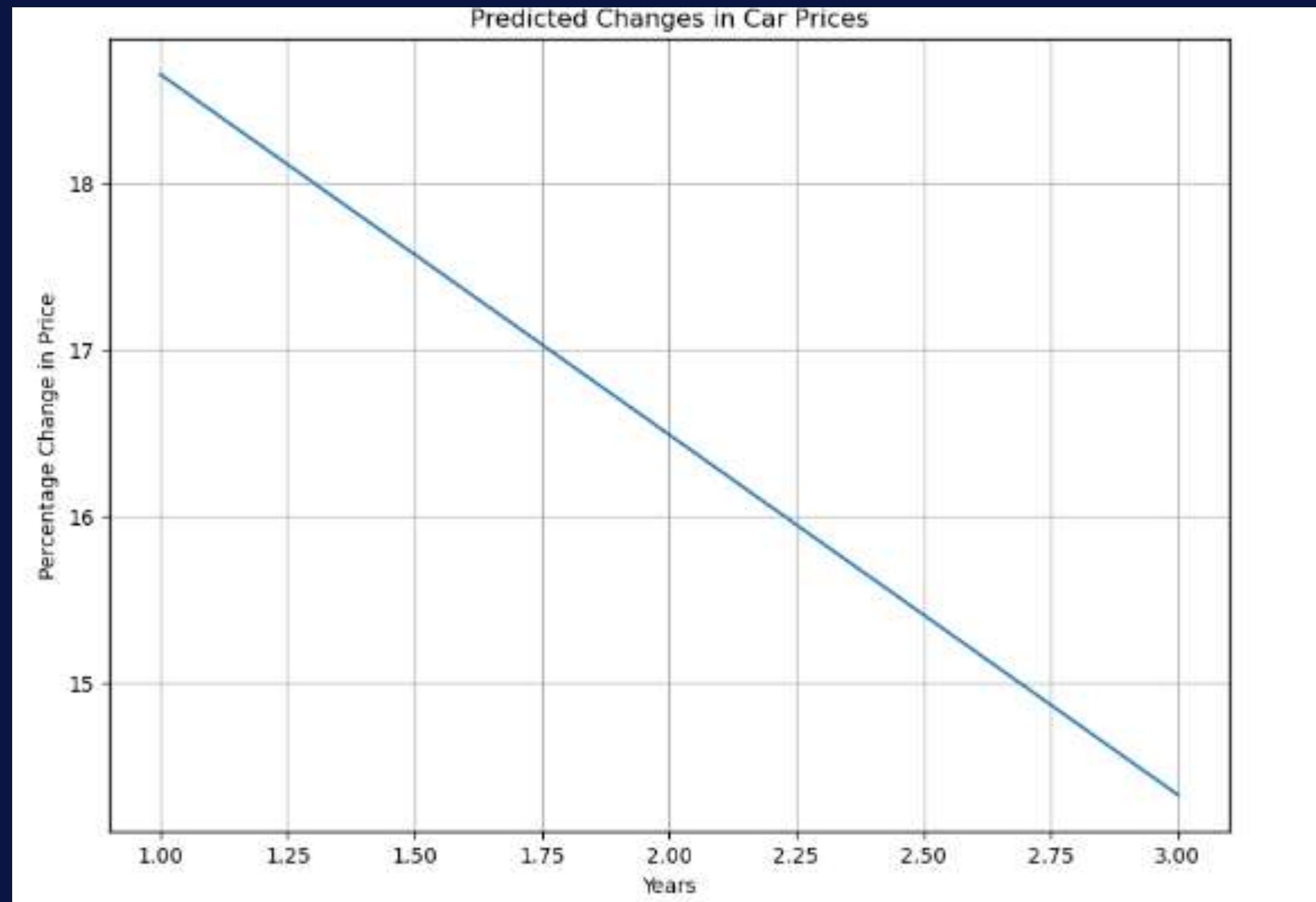
- The highest mean car price is for the color "Brown" at around 90,000SR.
- The second highest mean car price is for the color "Blue" at around 73,000SR.
- The third highest mean car price is for the color "Silver" at around 65,000SR.
- The lowest mean car price is for the color "Black" at around 65,000SR.
- The mean car prices for the other colors (Gold, Gray, White) range from around \$56,000 to 67,000SR.





PREDICTING CAR PRICES IN THE NEXT THREE YEARS

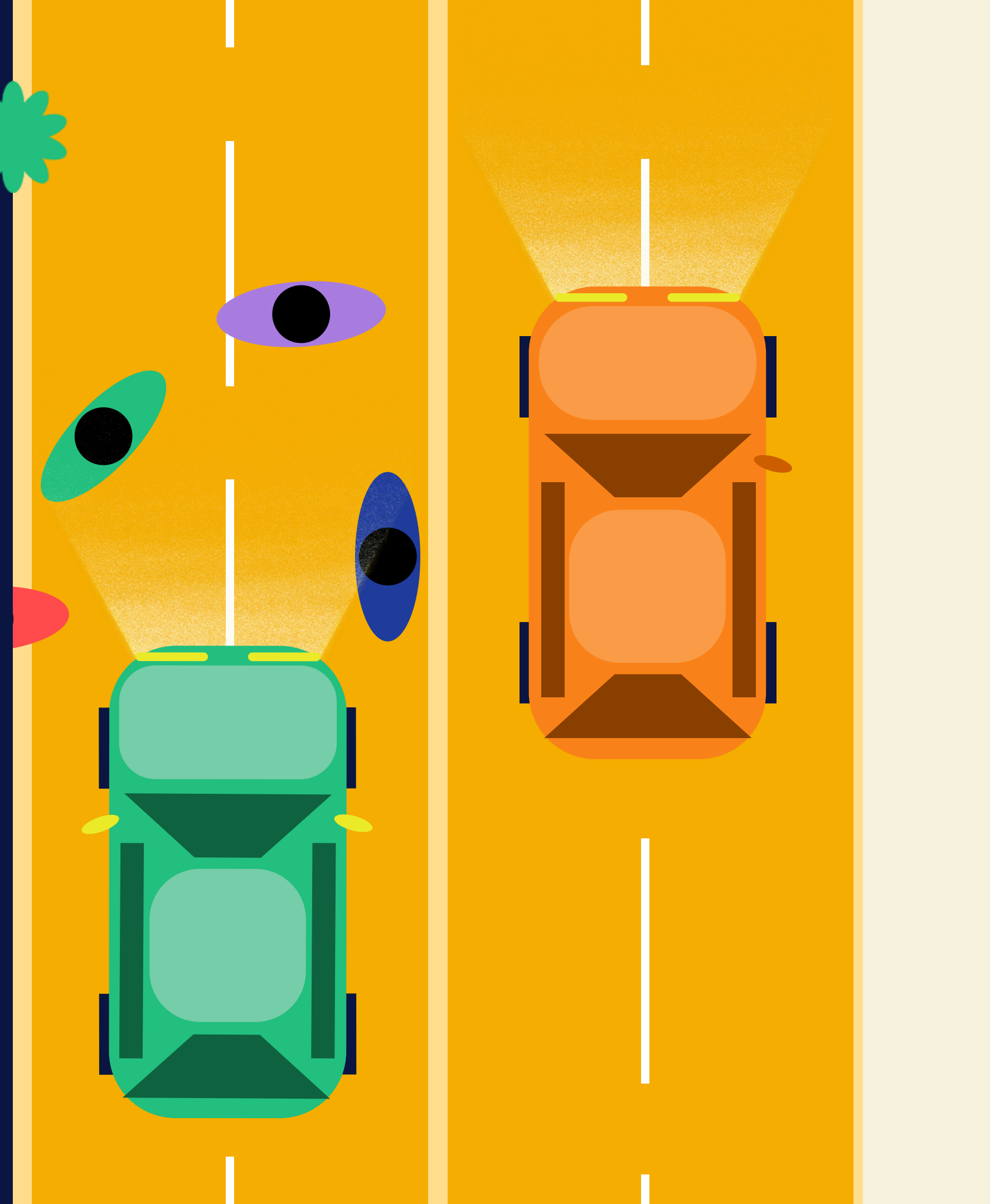




- The chart shows that car prices are predicted to steadily decrease by 2% each year, going from an 18% price drop at 1 year to a 16% price drop at 3 years. For a car initially priced at 20,000SR, this would mean a price reduction of around 3,600SR in the first year and a total reduction of over 6,000SR by the third year, resulting in a final predicted price of around 13,776SR.

SUMMARY

- The most popular car makes and models are BMW 740, BMW 730, Kia Rio, Toyota Rush, and Toyota Prado
- Automatic transmission cars have a significantly higher median price (~75,000 SR) compared to manual (~25,000 SR)
- New cars are much more expensive than used cars, with an average price difference of around 60,000 SR
- Mileage has a strong inverse relationship with car prices, as expected
- Colors like Brown, Blue, and Silver tend to have the highest mean car prices
- Car prices are predicted to steadily decrease by 2% per year over the next 3 years





CONCLUSION

- This car dataset is scrapped from (sa.opensooq.com) a Saudi second-hand market platform The link of data set on kaggle : [Saudi Arabia car prices Machine Learning.](#)

