

Car Price Prediction & Recommendation

ML COURSE PROJECT PRESENTATION

Use Case

Every car guy is on the market anytime, or pretends to be. Two usual thoughts are

- What would **any** kind of car cost
- And what cars are similar to the one I can't buy

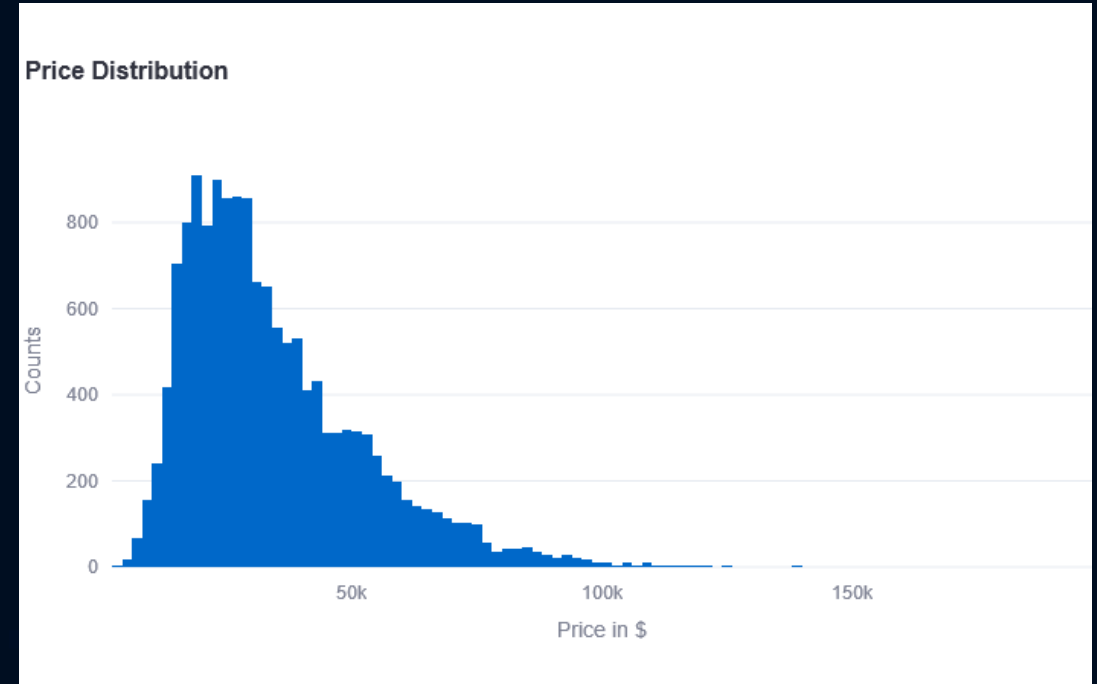
Solution

The problems above can be translated to:

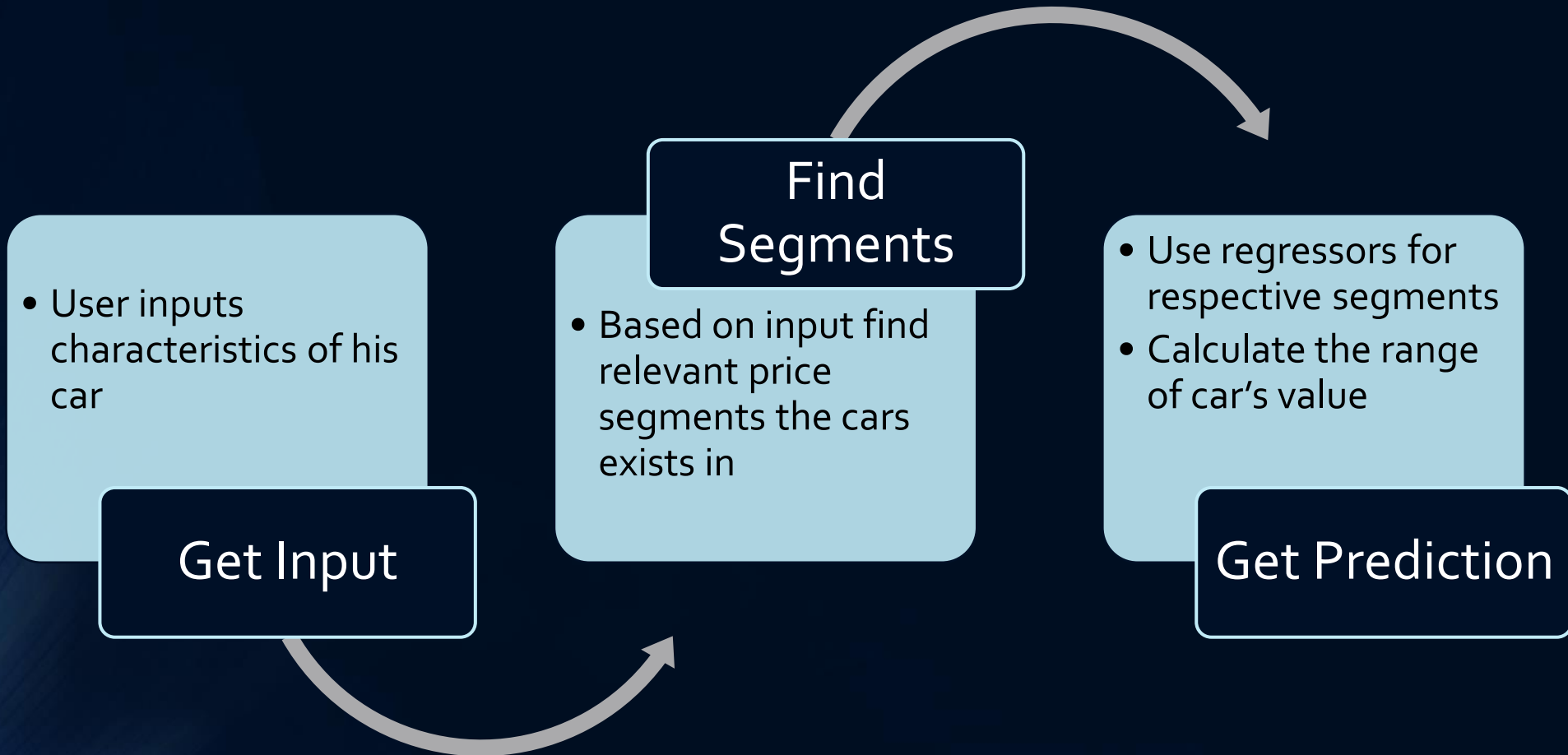
- A regression one (price prediction)
- And a clustering one (similarity between instances)

Price Prediction

- Split the data into 8 parts by price
- Train different model on each split
- In inference, use more than one regressors if needed.



Price Prediction



Price Prediction

Main	Extra	Miscellaneous
Select Make	Mileage	Select number of cylinders
Honda	Car Mileage...	Choose an option
Select Model	Select Transmission Type	Torque
Civic	Choose an option	Torque...
Select Year	Displacement(L)	Engine shape
2019	Car Displacement...	Choose an option
New or Used	Horsepower	Market Category
used	Car Horsepower...	Choose an option
Fuel type	Select Drive Type	City MPG
gas	Choose an option	Fuel Economy...
	Car shape	Highway MPG
	Choose an option	Fuel Economy...

Get Price

Car should be placed at: 18118 \$ - 23748 \$

Car Recommendation

- No labeled data, so unsupervised clustering algorithm was used.
- Assign each different vehicle by its features to a cluster
- Rank cars in the same cluster by cosine similarity

Car Recommender

Here, you can car recommendation with respect to the car you insert. Depending on the car you will get up to 5 recommended cars back that are similar to the one entered.

Select Make

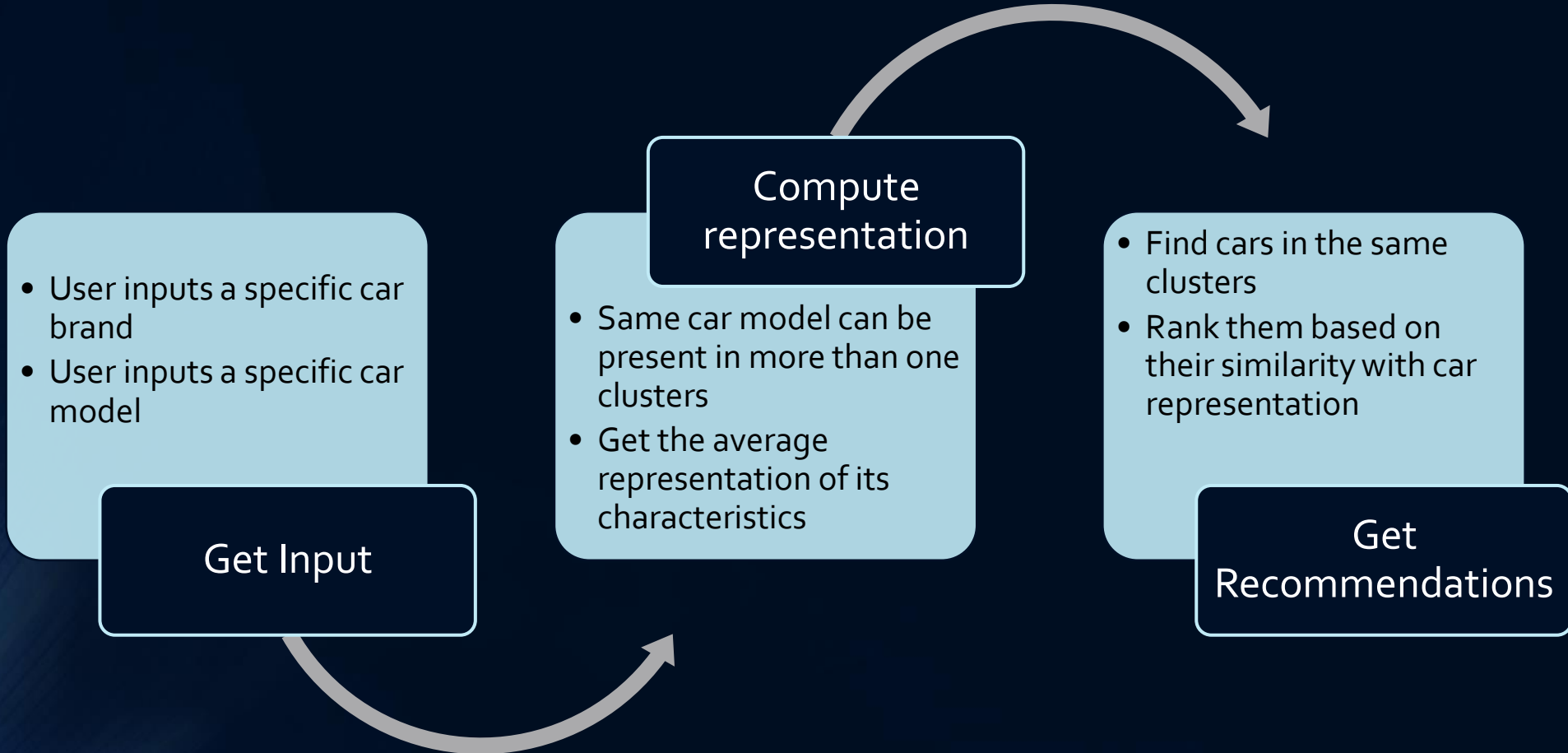
Honda

Select Model

S2000

- BMW Z4
- Toyota GR86
- Toyota 86
- Mazda MX-5 Miata RF
- Porsche Boxster

Car Recommendation



Thank you!

For your attention

Any questions?