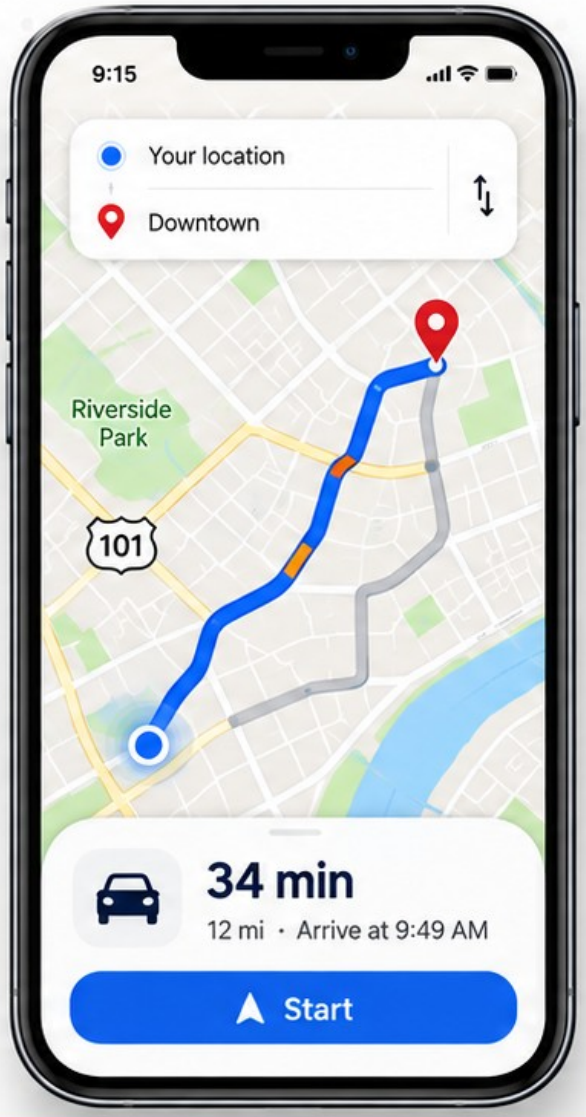
QUANZETTA

Module 3 — Predict Numbers with Regression

A New Kind of Prediction



Distance

Traffic

Road type

Current time

Past trips

Predicted arrival time =
34 minutes

How does the app know this number?

Module 3 — Predict Numbers with Regression

From Classification to Regression

Classification

Predicts a category

Customer Data (Input)

Age	28
Monthly spend	$50
Account age	6 months
Plan type	Basic

→

Output

- Churn
- No Churn

Regression

Predicts a numerical value

Trip Data (Input)

Distance	18 km
Traffic	Moderate
Road type	City streets
Current time	8:30 AM
Past trips	Similar times

→

Output

34 minutes

Same idea: use inputs to predict an output.

Used-Car Price Predictor

Our New Client Problem

Seller



"What price should I ask?"

Buyer

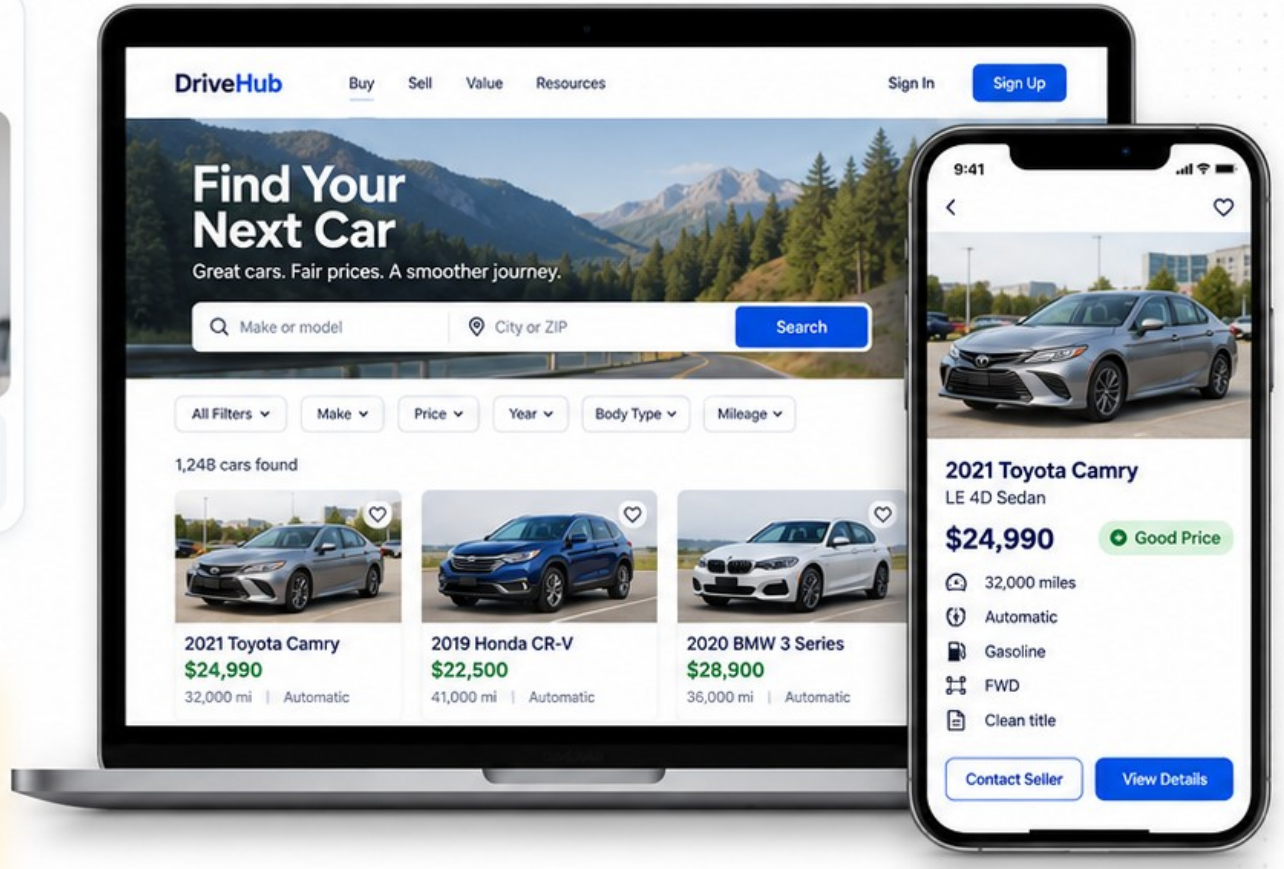


"Is this car fairly priced?"

Marketplace Platform



"We want a smart price estimator."



THE PROBLEM

Estimate a fair market price for a used car

Project framing

What Affects Price — and What We Need Next



These become our **input features.**

From Data to a Price Prediction

Historical used-car listings


Toyota Camry 2020
45,000 km
$24,500


Honda Civic 2019
60,000 km
$20,800


Ford Focus 2018
70,000 km
$14,200

⋮

Dataset (features + price)

Brand	Year	Mileage	...	Price
Toyota	2020	45000	...	24500
Honda	2019	60000	...	20800
Ford	2018	70000	...	14200
...	...	...	...	...

Machine Learning Model

Learns patterns from the data

Predicted Price

$22,600

To train the model, we need **historical used-car data.**

Next lesson:
find a suitable dataset.