

You'll find three CSV files attached with the following data:

data/driver_ids.csv

driver_id - Unique identifier for a driver

driver_onboard_date - Date on which driver was on boarded

data/ride_ids.csv

driver_id - Unique identifier for a driver

ride_id - Unique identifier for a ride that was completed by the driver

ride_distance - Ride distance in meters

ride_duration - Ride durations in seconds

ride_prime_time - PrimeTime applied on the ride

data/ride_timestamps.csv

ride_id - Unique identifier for a ride

event - event describes the type of event (see below)

timestamp - Time of event

Here's an overview of the event types:

requested_at - passenger requested a ride

accepted_at - driver accepted a passenger request

arrived_at - driver arrived at pickup point

picked_up_at - driver picked up the passenger

dropped_off_at - driver dropped off a passenger at destination

You can make the following assumptions about the XYZ_Taxi rate card:

Base Fare \$2.00

Cost per Mile \$1.15

Cost per Minute \$0.22

Service Fee \$1.75

Minimum Fare \$5.00

Maximum Fare \$400.00

After exploring and analyzing the data, please answer the following questions:

- Recommend a Driver's Lifetime Value (i.e. the value a driver to over the entire projected lifetime of a driver). You can assume that XYZ_TAXI takes 20% of each fare.
- What are the main factors that affect a driver's lifetime value?
- What is the average projected lifetime of a driver? That is, once a driver is onboarded, how long does he/she typically continue driving with XYZ_TAXI.
- Explore how drivers churn once they start driving with XYZ_TAXI Are there any predictive indicators for driver churn?
- Do all drivers act alike? Are there specific segments of drivers that generate more value for XYZ_TAXI than the average driver?
- What relevant business uses does this metric have?