TeLlevo - A ridesharing Data Challenge

Exercise 1

Intro

Please, picture yourself in this situation:

Today is your first day at *TeLlevo*, a top mobility startup, as a data analyst within the Data Team.
You turn on your laptop and all your favorite analysis tools are ready to go. Then, your phonerings:

The Boss: "*Welcome to the Company! I'm Antonio de Juan, CEO of TeLlevo. I'm sure you will enjoythe challenge of improving cities through technology*"
You: "*Thanks, I'm eager to begin!*"

The Boss: "*Great. I know you've just arrived but I need your help*"
You: "*Sure. What can I do for you?*"

The Boss: "*The new Chief Operating Officer will join us in 48 hours. Please, could you prepare apreliminary data analysis for her? It must have two steps. The first one must be a descriptiveanalysis: what? how many? when? where... you know. *"
You: "*Got it*"The Boss: "*The second one must include at least three recommendations based on the previousstep. Do you think you can do it?*"You: "*Of course, Shall I start right now*"

The Boss: "*Thanks and welcome!*"

About TeLlevoTeLlevo is a mobility startup that lets any user to book a ride to from any point A to any point B within the city using a smartphone. Ride value is calculated at the time of request automatically by the app, considering distance, estimated travel time, and current car availability (demand /offer balance). Once the ride ends, we charge passenger's credit card, and transfer 75% of this value to the driver's bank account. Finally, before the passengers gets picked up, the ride can be cancelled by either the driver or the passenger.

Description

Attached to this email you can find a dataset that contains the first year of TeLlevo journeys.

Please, complete the two steps analysis:

- A descriptive data analysis. Please, answer questions like:
    - how many? (e.g: vehicles, riders, drivers)
    - when? (e.g: journeys/price/cost per time period, are the journeys quick?
    - what? (e.g: reservations/asap, vehicle type)
    - where? (e.g: origin map, best origins)
    - who? (e.g: worst riders, best drivers)○any question you consider interesting
- At least 3 business recommendations based on your previous analysis. Feel free to recommend anything you want, we ask you only one thing: each recommendation must be supported by data

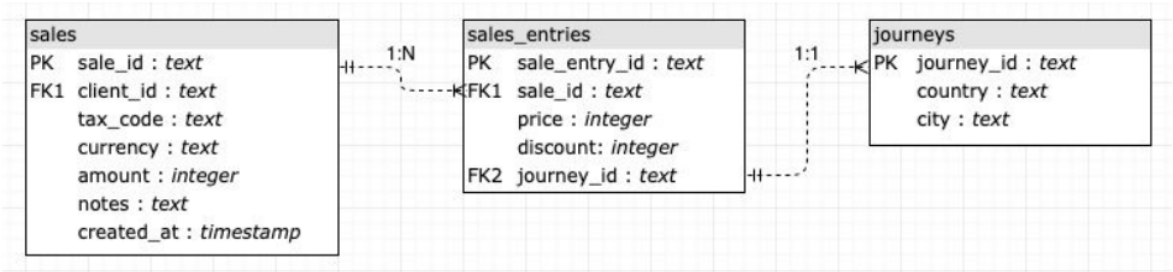
Tips & Hints:

- Use any tool you want: Tableau (we use it intensively!), Qlik, Python/R notebooks, PowerBI, Excel, Carto…
- We are going to check not only if you know how to make a meaningful analysis but also if you know how to explain it
- If you have any doubt ping us!

Exercise 2

Intro

Consider these three tables:



- PK means primary key, FK stands for foreign key
- A sale could have multiple sale_entries, each sale_entry only has a journey.

Description

Please, send us the code for these 3 queries:

- The total sale amount per month, year, and currency. That amount should be divided by 100 and truncated to one decimal.
- The total discount per month, year and currency. Excluding data from 2017.
- The total sale amount per city and country. Excluding those cities whose sales are lower than 1500.