## **Dataset**

TravelTide stores its data in a relational database, which you can access here:

postgres://Test:bQNxVzJL4g6u@ep-noisy-flower-846766.us-east-2.aws.neon.tech/TravelTide?sslmode=require

Connected via PostgreSQL

Description of each table and its columns:

users: user demographic information

- user\_id: unique user ID (P-key, int)
- birthdate: user date of birth (datetime)
- gender: user gender (nominal)
- married: user marriage status (binary)
- has\_children: whether or not the user has children (binary)
- home\_country: user's resident country (nominal)
- home\_city: user's resident city (nominal)
- home\_airport: user's preferred hometown airport (nominal)
- home\_airport\_lat: geographical north-south position of home airport (decimal)
- home\_airport\_lon: geographical east-west position of home airport (decimal)
- sign\_up\_date: date of TravelTide account creation (datetime)

sessions: information about individual browsing sessions (note: only sessions with at least 2 clicks are included)

- session\_id: unique browsing session ID (P-key, string)
- user\_id: the user ID (F-key, int)
- trip\_id: ID mapped to flight and hotel bookings (F- key, string)
- session start: time of browsing session start (timestamp)
- session\_end: time of browsing session end (timestamp)
- flight\_discount: whether or not flight discount was offered (binary)
- hotel\_discount: whether or not hotel discount was offered (binary)
- flight discount amount: percentage off base fare (decimal)
- hotel\_discount\_amount: percentage off base night rate (decimal)
- flight\_booked: whether or not flight was booked (binary)
- hotel\_booked: whether or not hotel was booked (binary)
- page\_clicks: number of page clicks during browsing session (int)
- cancellation: whether or not the purpose of the session was to cancel a trip (binary)

flights: information about purchased flights

- trip\_id: unique trip ID (P-key, string)
- origin\_airport: user's home airport (nominal)
- destination: destination city (nominal)
- destination\_airport: airport in destination city (nominal)
- seats: number of seats booked (int)
- return flight booked: whether or not a return flight was booked (binary)
- departure\_time: time of departure from origin airport (timestamp)
- return\_time: time of return to origin airport (timestamp)
- checked\_bags: number of checked bags (int)
- trip\_airline: airline taking user from origin to destination (nominal)
- destination\_airport\_lat: geographical north-south position of destination airport (decimal)
- destination\_airport\_lon: geographical east-west position of destination airport (decimal)
- base\_fare\_usd: pre-discount price of airfare (decimal)

hotels: information about purchased hotel stays

- trip\_id: unique trip ID (P-key, string)
- hotel\_name: hotel brand name (nominal)
- nights: number of nights stayed at the hotel (int)
- rooms: number of rooms booked with hotel (int)
- check\_in\_time: time user hotel stay begins (timestamp)
- check\_out\_time: time user hotel stay ends (timestamp)
- hotel\_per\_room\_usd: pre discount price of hotel stay per room per night (decimal)

## TravelTidefilteredSessionLvl.csv

- Sessions Level Aggregation
- Filters applied: session\_start > '2023-01-04', only users with more than 7 sessions
- 49,211 rows
- 44 columns

## TravelTideFinal.csv

- User Level Aggregation
- Filters applied: session\_start > '2023-01-04', only users with more than 7 sessions
- Engineered Features
- 5,998 rows
- 21 columns