

# Zoomer- Database Schemas

## User Microservice - PostgreSQL

### • User Table

- uid - The user's unique identifier
- email - The user's email
- password - The user's password as a hashed string
- name - The user's full name
- rides - Number of rides that a user took
- isDriver - a boolean to test whether the user is a driver
- availableCoupons - a set of integers that contains coupons' cid which are available to the user
- redeemedCoupons - a set of integers that contains coupons' cid which are used by the user.

### • Coupons Table

- cid - the dedicated coupon number for a certain coupon
- name - the title of the coupon that displays on the app (e.g. \$5 off)
- description - The detail rule of the coupon
- discount - The amount of dollars that can be discounted from a ride
- expiry - The expiry time of the coupon; save in date format.

## Location Microservice - Neo4

### • Neo4j nodes must have the label of either "user" or "road":

- Each "user" node must have "uid", "longitude", "latitude", "is\_driver" and "street" attributes.

- Each “road” node must have “name”, “is\_traffic”.
- “road” node can be connected by the relationship “ROUTE\_TO” which contains the attribute “travel\_time” which contains the time of the travel from a road node to the other; the unit is minute and “is\_traffic” which is the boolean to identify whether the road is busy.

## TripInfo Microservice - MongoDB

The collection name in the MongoDB instance should be “trips”.

- TripInfo Schema

- \_id - The ObjectId of the document (i.e. a unique identifier for each document). The id is auto-generated by Mongo when a document is inserted into the database
- distance (km) - The distance of the trip.
- totalCost (\$) - The total cost of the trip before any discount
- startTime - The start time of the trip
- endTime - The end time of the trip
- timeElapsed - The time spent for the entire trip (EndTime - StartTime)
- driver - The uid of the driver in this trip
- driverPayout - The money that is earned by driver, it is 65% of the totalCost
- passenger - The uid of the passenger in this trip
- discount - the discount for this trip; it shows how much money the passenger saves on the trip cost.

**Note: basic information for the databases is provided in the docker-compose file.**