You are going to build a backend service (API and database) for a food delivery app. You are given the following raw datasets to build upon:

1. Restaurant data: [restaurants.json](https://drive.google.com/file/d/1UcKCigtaIeH703ZLbDacaAFCrlkngvIz/view?usp=sharing)

This dataset contains a list of restaurants with their locations, business hours, menus, and cash balances (the amount of money they have in the merchant account in the platform, it will increase when a customer purchases their dish).

1. User data: [users.json](https://drive.google.com/file/d/1syj-RpQCohXvJiV5vkG74vL9szGCLYem/view?usp=sharing)

This dataset contains a list of customers with their current locations, transaction history, and cash balance.

You will be required to process and transform these raw data before importing them into your backend.

# Objective

Your objective is to build an **API server** with **documentation** and **database** that will allow a frontend developer to build an easy to use apps for the user and the merchant based on the documentation that you’ve provided.

Your API should make the following tasks possible in the frontend:

* ~~List all restaurants that are open at a certain datetime => (customer & public)~~
* ~~List all restaurants that have~~ *~~x-z~~* ~~number of dishes within a price range => (customer & public)~~
* ~~List all restaurants within the vicinity of the user’s location or (any location), ranked by distance (the distances will be displayed in the app) => (customer)~~
* List all restaurants that are open for *x-z* hours per day or week => (customer)
* ~~Search for restaurants or dishes by name, ranked by relevance to search term => (customer & public)~~
* ~~Search for restaurants that has a dish matching search term => (customer & public)~~
* ~~The top x users by total transaction amount within a date range => (resto)~~
* ~~The most popular restaurants by transaction volume, either by number of transactions or transaction amount => (customer)~~
* ~~Total number of users who made transactions above or below $v within a date range => (resto)~~
* ~~List all transactions belonging to a restaurant => (resto)\*~~
* ~~List all transactions belonging to a user => (resto & customer)\*~~
* Process a user purchase in an atomic manner and ensure the changes of cash balances can be applied safely and correctly. => (member)

You don’t need to worry about API authentication, let’s assume that the user/merchant logs in using HTTP Basic Authentication (username: the user/restaurant id, password: hungry12345678). However, **authorization is required**, e.g. purchases can only be seen by the user who made the order and the restaurant who fulfills the order.

# Automated test

Write a test suite to validate your code. (This is optional, we will consider the code as complete without this).

# Submission

When you’re done with this assignment, please invite **ukazap** and **conlectus** on your **GitHub private repository** as contributors. Please also deploy the API to any cloud service provider (e.g. Heroku). Within the repository, please include the following:

* How to import the raw data to the backend
* How to set up and start the backend server (dockerized app is preferred)
* How to run the test suite (if applicable)
* The API documentation
* The URL to the API Happy coding and good luck!