XLR8 Backend Interview



Story

John decided to spend the weekend away with his family, and to do that he needs to find a hotel nearby the chosen location. For John there are 2 important factors for the right hotel choice - location and price, therefore he needs to search places surrounding a specific location, identified by Latitude and Longitude and get the list of results ordered by proximity to the place or by price per night.

Your job is to develop a way to give John the opportunity to find the right place for his well desired getaway with his family.

Getting the data

You can get the list of Hotels available on our system by using our API by calling the endpoints using a GET method.

You should build a set of objects to get a solution for this problem, on XLR8RMS integration side, we'll need to call the following method:

Search::getNearbyHotels(\$latitude, \$longitude, \$orderby)

Mandatory parameters:

- \$latitude
- \$longitude
- Optional parameters:

 \$orderby // Order by parameter should interpret one of the following values "proximity" or "pricepernight"

If the \$orderby parameter is not defined when calling the method, we're expecting to get the list ordered by proximity.

Your code should be prepared to process multiple sources of data (dynamic number), ie, multiple endpoints:

Source 1: https://xlr8-interview-files.s3.eu-west-2.amazonaws.com/source 1.json

Source 2: https://xlr8-interview-files.s3.eu-west-2.amazonaws.com/source_2.json

Source n ...

Deliverables

You should send a tar format file, named with <first_name>_<last_name>.tar, replying to the email you received this exercise with the following data:

Expected output

Output should be a list of results with the following format:

Hotel Name, Distance to local in KM, Price Per night

Sample output

- Hotel Lisbon, 1.7 KM, 23.56 EUR
- Hotel London, 8 KM, 11.56 EUR
- Hotel XPTO, 21.56 KM, 99.56 EUR

Evaluation Parameters

- Code reusability / extensibility
- Code complexity
- Cyclomatic Complexity
- Performance
- Comments

Bonus Points

If the package is delivered in a composer package format, where all libraries used are required on the composer file, a 20% bonus will be given on this task.