Backend assignment

Confidential

Summary

ParkMan app displays parking garages information on the map. A garage information typically contains hourly price, local currency, location coordinates, garage name, garage owner's contact email, etc.

ParkMan's backend handles fetching of this information based on a user's current location and time.

The purpose of this assignment is to simulate a very simple version of this.

1. MySQL

Table 1 (look below) is a list of garages and their respective data. Your task is to create a DB schema out of it. Convert the schema to SQL and save the list according to the schema in a database.

Assume the DB's tables are going to eventually grow to have millions of rows, so pay attention to the used data types, and index keys.

2. PHP

Use MVC or any other preferred architecture for this task.

Using the schema you created previously in section 2, provide 1-3 methods (functions) for fetching garages based on country, garage owner, and location (latitude and longitude).

The output should be in json-format. Figure 1. shows an example of the expected output. When a garage can't be found, the appropriate HTTP status code should be emitted.

3. Submission

The assignment is a simple task, which can be solved in several ways. You may choose any approach that suits you best. We however, appreciate code clarity, separation of concern, easy extensibility and testability.

Create a private repository on GitHub and share it with Anselm ([anselm-pm](#)) , Mikko ([mideelio](#)). and Teemu ([indigoe](#)).

Feel free to ask if you have any questions and thank you for your interest and input!

Disclaimer: All work submitted will be property of ParkMan.

Table 1

Garage name	Garage parameters	Parameter Values
Garage1	Owner	AutoPark
	Hourly price	2
	Currency	€
	Contact email	testemail@testautopark.fi
	Country	Finland
	Center coordinate	60.168607847624095 24.932371066131623
Garage2	Owner	AutoPark
	Hourly price	1.5
	Currency	€
	Contact email	testemail@testautopark.fi
	Country	Finland
	Center coordinate	60.162562 24.939453
Garage3	Owner	AutoPark
	Hourly price	3
	Currency	€
	Contact email	testemail@testautopark.fi
	Country	Finland
	Center coordinate	60.16444996645511 24.938178168200714
Garage4	Owner	AutoPark
	Hourly price	3
	Currency	€
	Contact email	testemail@testautopark.fi

	Country	Finland
	Center coordinate	60.165219358852795 24.93537425994873
Garage5	Owner	AutoPark
	Hourly price	3
	Currency	€
	Contact email	testemail@testautopark.fi
	Country	Finland
	Center coordinate	60.17167429490068 24.921585662024363
Garage6	Owner	Parkkitalo OY
	Hourly price	2
	Currency	€
	Contact email	testemail@testgarage.fi
	Country	Finland
	Center coordinate	60.16867390148751 24.930162952045407

Figure 1

```
{
     "garages":[{
          "garage_id":50786421,
          "name":"Garage 1",
          "hourly_price": 2
          "currency":"€",
          "contact_email":"testemail@testautopark.fi",
          "point":"60.168607847624095 24.932371066131623",
          "country":"Finland",
          "owner_id":29190,
          "garage_owner":"AutoPark"
     },
   .....
   ]
}
```