

QUESTION #1 (20 minutes)

You have been contracted by a developer to make an app that allows users to display their most frequently visited places on an interactive map.

You, of course, will need to write a simple HTML page that manages the data. You also will need to create arrays that store data of different types, which will be done in the Javascript section of your HTML page. (In Question 2, you will map the data).

STEP 1:

Your source data will come from a database that stores each piece of information in a separate list (very common real world scenario). Being a good web developer, you decide to first organize these lists as arrays.

Declare variables.

- One array to store the names of some businesses (feel free to create your own businesses if you like but have at least 3 items):

Le Gros Hamburger	Kitty Supreme Pet Spa	Marche Foodplus
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- One array that stores a quick description of the business:

Restaurant	Pet Supplies	Grocery Store
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- Add a rating array (values between 1 to 10) make sure there is a good distribution:

1	4	7
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- One multidimensional array that stores lng/lat coordinate pairs for the business

[174.77936, -41.27521]	[174.77438, -41.29199]	[174.77368, -41.29894]
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STEP 2:

You decide to write a function that converts your arrays into a string that resembles geoJson format. As you will not be creating a distinct geoJson file, you will need to concatenate chunks of string data and array values into the correct format. This is what you had to do in Assignment 1 so, luckily, you already know the correct format.

Write a function that takes as its input three arrays and outputs a string.

Call your function `formatData`.

Start your output string with the geoJson markup syntax. The code you need for geoJson is below:

```
"{'type': 'FeatureCollection', 'features': [ "
```

Next, add the arrays to your output string. There are multiple ways to do this: if you are comfortable with loops feel free to use one here.

Otherwise, simply copy and paste the code three times, one for each location. Be sure to use the array address from your input arrays; do not write out the value. Remember rating is an integer, does not need quotes.

```
"{'type': 'Feature', 'geometry': { 'type': 'Point', 'coordinates': ["+  
COORDINATES HERE +"] }, 'properties': {'title': '"+ NAME HERE +',  
'description': '"+ DESCRIPTION HERE +', 'rating': "+ RATING HERE +"}} "
```

Remember to add a comma after this section for the first two locations, and don't put one after the third.

Finish your output string with the geoJson markup syntax that goes at the end.

```
"}];"
```

This function needs to pick items from each array and output them as a single string that will be used to put the items on a map.

Call your function, store the returned string as "var mapPointData".
Ie. var mapPointData = formatData(a,b,c,d);

Comment your code.

Save this document as:

lastname_quiz1_q1.html (replacing lastname with your own last name)

Don't close Sublime Text. Keep Question 1 content open.

Email your .html document to:

renee.sieber@mcgill.ca and liam.rosborough@mail.mcgill.ca (NOT IAN)

