



Software Developer Assessment Task

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Task 1 - API - React

Description

Built a single Page React application which fetches information from an API and displays the results on a table.

API Endpoint: <http://universities.hipolabs.com/search?country=Australia>

Instructions

- When the page loads, the table should be empty.
- Based on the API information, structure the table columns and naming
- Add three buttons, 'LOAD', 'DELETE' and 'ADD'
- When 'LOAD' is clicked, fetch the information and display the results on the table
- When 'DELETE' is clicked, remove the last item of the table
- When 'ADD' is clicked, insert the first item of the table to the last (first item should remain as it is)

Assessment

The following are assessed from this task

- How familiar you are with APIs
- Basic React knowledge
- How state is handled
- Array/object operations
- Coding standards and naming conventions
- Structuring of the project
- Git commits

Bonus

- Using a UI package to optimise the design
- Use of Redux

Submission

Create a github repository and share the repo link. A repository with only one commit is not acceptable. Showing the development process is just as important as the task itself.

Task 2 - API - PHP

Description

Create a PHP file which when executed from the command line, prints the values based on the arguments passed.

API Endpoint: <https://api.publicapis.org/entries>

The response is a JSON object with two fields:

- count
- entries

Each record in 'entries' has following schema

- API
- Description
- Auth
- HTTPS
- Cors
- Link
- Category

Instructions

- Write code inside php file which fetches data from the API and prints the values of 'API' decreasing alphabetically
- The file accepts two arguments 'category' and 'limit'
- Print the results matching the 'category' and 'limit' is the number of results to print eg: php file.php Weather 5
- If no records matches the category, print 'No results'

Possible values of 'category' passed as an argument

- Animals
- Anime
- Blockchain
- Books
- Business
- Calendar
- Weather
- Transportation
- Health
- Jobs
- Music

Assessment

The following are assessed from this task

- Handling API calls
- Array/object operations
- Coding standards and naming conventions

Submission

Create a github repository and share the repo link.

Task 3 - SQL

Description

Given two tables 'customer' and 'broker'. Write an SQL query to generate a summary of how many customers are under a particular broker. The results should be sorted from high to low number of customers. If brokers have the same number of customers, then sort alphabetically. The result should list the broker name followed by the customer count. The column names are not tested, so use whatever is appropriate.

CUSTOMER

ID	NAME	AMOUNT	BROKER_ID
1	sam	3000	4
2	john	4000	2
3	mack	5000	2
4	test	3000	3
5	june	2000	3
6	mike	4000	1
7	annie	4000	2
8	micheal	2000	1
9	tom	2000	4
10	jason	6000	4

BROKER

ID	NAME
1	Ted
2	Mark
3	Aaron
4	Luke

Assessment

The following are assessed from this task

- SQL

Submission

Write the query on a sql file and add to the same repository for task 2.