Learnosity Application Support Engineer Tech Test

As part of getting to know you, we’d like to see what your strengths are. But we also recognize that you need to get to know us, too. So, rather than send out the same ol’ tech test meant to assess your knowledge of a given language, or coding best practices, we thought it would be a fine idea to give you an introduction to our products.

For this test we will ask you to interact with our Data API to retrieve and extract some data. And persist it as a .csv file.

The Learnosity Data API

Most of Learnosity’s API are frontend API whose requests are signed in the backend using a backend language like PHP, Python, Ruby, etc, and are then initialized and interacted with on the frontend using Javascript.

Data API is an exception and it is a purely backend API used to set or retrieve raw data that can be used for a range of tasks ranging from custom reporting, to programmatic content authoring, to upgrading gradebooks, to analyzing content or learner performance across long spans of time, to firing off a variety of jobs that take place in Learnosity’s backend.

For this test we will ask you to retrieve some “session” data. You can think of a session as the data belonging to a test that a learner is currently taking and or has already finished.

**Tasks**

1. Retrieve the session data for **completed** sessions out of the following session\_ids:
   1. a9c92dc1-725c-456a-acc9-cdd32fd9f81b
   2. ecc0bdb2-2fc9-4489-b2d6-b818a8b0ebc0
   3. ee5ed0c3-f590-40d0-8480-8037914738ba
   4. 93af036e-2aad-425e-a997-fa3827cb4c30
2. Extract the following values from those sessions and save them to a .csv file named results.csv, which each row containing:
   1. Session ID
   2. Question Reference
   3. Question Type
   4. Score for that question
   5. Maximum score possible

**Zip file contents**

Within the zip file you will find a /vendor folder, that folder contains the dependencies necessary to run Data API (the Learnosity PHP SDK).

The only file you will need to modify is data.php.

data.php contains the following functions:

* makeDataAPICall: this function will make the call to Data API and retrieve and return the results as a PHP array.
* downloadSessions: this function contains the JSON object you will use to bring down the data to process
* processSessions: this is the function where you will process the data and save the CSV file.

Please feel free to add other functions if you need them or if they would make the job easier for you.

**Running the file**

You should be able to run the file in the CLI if your choice with PHP 7.4 or above installed by running the command: php data.php

If your request has ran successfully, you should see an output similar to this followed by any other outputs you may have added:

/sessions/responses

{"status":true,"timestamp":1647621853,"next":"1647609999.156940","versions":{"requested":"v2022.1.LTS","mapped":"v1.53","concrete":"v1.53.0"},"records":1}

**Documentation**

To help you get going you can see Data API’s documentation here: <https://reference.learnosity.com/data-api>   
  
And live demos that show the data returned by Data API can be found here: <https://demos.learnosity.com/analytics/data/index.php> (the source code for that demo can be found at the top right).

Please be sure to document your code.​