

ASSIGNMENT

Fetch and manipulate JSON data from a fictional Supermetrics Social Network REST API.

INTRODUCTION

Why we give this assignment and how we assess this assignment.

This example highlights some of the key components of working at Supermetrics. We use this assignment to determine the level of your coding level and where you might fit in our developer stack. There is no wrong answer or wrong way of doing this. Please do this by yourself.

Based on the position you have applied for you will be asked to submit based on one of the following languages.

Please follow the instructions for the language you have been asked to submit the assignment.

PHP

This task may take up to between **3-5 hours** and should be done in **object oriented PHP (7.x/8.x)**.

We would like to see object-oriented code, especially considering the last objective of the assignment: "Design your thinking to be generic, extendable, easy to maintain by other staff members while thinking about performance."

NOTE: Please **do not use any existing framework such as Laravel, Symfony etc.** You may use external standalone libraries if you need, this could include specific libraries from projects such as Symfony.

If you do use a library, please let us know why.

JAVASCRIPT & TYPESCRIPT

This task may take up to between **3-5 hours** and should be done in **Javascript or Typescript**.

NOTE: You may use frameworks such as React and VueJS

PYTHON

This task may take up to between **3-5 hours** and should be done in **Python 3+**.

NOTE: Please do not use any existing framework such as Django etc. You may use external standalone libraries if you need and components.

JAVA

This task may take up to between **3-5 hours** and should be done in **Java**.

We would like to see object-oriented code, especially considering the last objective of the assignment: “Design your thinking to be generic, extendable, easy to maintain by other staff members while thinking about performance.”

NOTE: Please do not use any existing framework such as Spring, Struts etc. You may use external standalone libraries if you need and components.

If you do use a library, please let us know why.

TASK

1. Register a short-lived token on the fictional Supermetrics Social Network REST API
2. Fetch the posts of fictional users on a fictional social platform and process their posts.
3. You will have 1000 posts over a six month period.
4. Show stats on the following:
 - a. - Average character length of posts per month
 - b. - Longest post by character length per month
 - c. - Total posts split by week number
 - d. - Average number of posts per user per month
5. Design your thinking and code to be generic, extendable, easy to maintain by other staff members while thinking about performance.

You do not need to create any HTML pages for the display of the data. **JSON output of the stats is sufficient.**

Return the assignment in any of the following ways:

- Use the custom link in the bottom of this email
- OR - Place on a github/bitbucket/gitlab repo that we can access,

OR - Zip or Tar the files into an archive and send it along to us by email
OR - Place in a Dropbox/Google Drive that we can access.

Please submit your code within a week from today.

API DOCS

Use the following endpoint to register a token:

POST: <https://api.supermetrics.com/assignment/register>

PARAMS:

client_id: jul6a6m81mhid5ue1z3v2g0uh
email: your@email.address
name: Your Name

RETURNS:

sl_token: This token string should be used in the subsequent query. Please note that this token will only last 1 hour from when the REGISTER call happens. You will need to register and fetch a new token as you need it.
client_id: returned for informational purposes only
email: returned for informational purposes only

Use the following endpoint to fetch posts:

GET: <https://api.supermetrics.com/assignment/posts>

PARAMS:

sl_token: Token from the register call
page: integer page number of posts (1-10)

RETURNS:

page: What page was requested or retrieved
posts: 100 posts per page