

Data Question

Twitch has a set of API endpoints that allow 3rd party developers to build new tools on top of the Twitch platform. There are many popular tools that Twitch viewers and streamers use that are powered by the Twitch API.

Your Product Manager has asked you to look into API call logs to help them get a better understanding of:

- which application developers are important to the developer ecosystem
- which API endpoints are more important to continue to maintain.

Please analyze the dataset given in a way that you believe best helps your Product Manager understand the trends of the API data. For example, you can write a report, create a dashboard, draft an email, etc. Whichever way you choose to present the data is up to you, but keep in mind that the Product Manager is not as technical as you are, and they will be leaning on your expertise to understand the trends quickly and easily. Please feel free to use any tool that you feel comfortable using when analyzing the data, but be sure to include any intermediary work along with your final analysis.

Dataset Description

You pulled data in Jan 2018 from two tables and got the following data (in csv files):

1. `daily_logs.csv` – contains the daily API call logs for different applications calling the Twitch API
 - `the_date`: the date of the Twitch API
 - `client_id`: the internal id of a given application calling the Twitch API
 - `api_endpoint`: the name of a specific Twitch API call, see **notes on api_endpoint** in the next section for important information about this field
 - `num_requests`: the total number of times the API call was requested by an application
 - `avg_latency`: the average latency (in milliseconds) of the API call
2. `app_metadata.csv` – contains a mapping of `client_id` to human readable application names
 - `client_id`: the internal id of a given application calling the Twitch API
 - `application_name`: the name of the application chosen by the application developer
 - `application_author`: the name of the application developer

Notes on api_endpoint field

The structure of an api_endpoint is the following:

`{http_request_method} /{twitch_api_version}/{api_endpoint_method}`

Examples of http_request_method will include GET, POST, PUT, DELETE. Having knowledge of HTTP request methods is not necessary for this exercise, but you can look at the link below for more background information.

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Methods>

Examples of twitch_api_version include /v3, /v5, and /helix. Note that v3 and v5 versions are old versions of the API, and will be removed on Dec 2018. Helix is the codename of the new Twitch API. Note that different API versions can have the same API endpoint method name.

Examples of api_endpoint_method are numerous, but at a high level they allow the developer to do things like “get metadata on a specific video clip” or “get a list of who is following streamer X”. You do not need to know about specific endpoints for this exercise, but you can look at the links below for references to both the new Helix API and the old v3/v5 API.

<https://dev.twitch.tv/docs/api/reference>

<https://dev.twitch.tv/docs/v5>