Why the assignment?

We highly appreciate your skills & experience, and this is a great opportunity to demonstrate them from the comfort of your home, at your own pace. But why an offline round?

- If you were running a restaurant, would you hire a chef without tasting their food?
- If you were a Master Chef, would you join a restaurant that does not taste your delicacies before handing over the keys to their kitchen?
- We recognize and understand the importance of early alignment for career growth & success. This is one of the few ways to help us both understand that alignment.

Assignment

Objective

To make an API to fetch latest videos sorted in reverse chronological order of their publishing date-time from YouTube for a given tag/search query in a paginated response.

Basic Requirements:

- Server should call the YouTube API continuously in background (async) with some interval (say 10 seconds) for fetching the latest videos for a predefined search query and should store the data of videos (specifically these fields - Video title, description, publishing datetime, thumbnails URLs and any other fields you require) in a database with proper indexes.
- A GET API which returns the stored video data in a paginated response sorted in descending order of published datetime.
- A basic search API to search the stored videos using their title and description.

Bonus Points:

- Add support for supplying multiple API keys so that if quota is exhausted on one, it automatically uses the next available key.
- Make a dashboard to view the stored videos with filters and sorting options (optional)

Instructions:

- You are free to choose any search query, for example: official, cricket, football etc.
- Try to keep your commit messages clean, and leave comments explaining what you are doing wherever it makes sense.
- Also try to use meaningful variable/function names, and maintain indentation and code style.
- Submissions should have a README file containing instructions to run the server and test the API.
- Accepted languages
    1. Python
    2. JavaScript
- You can share a public link to a GitHub or and any other repository with your solution or directly share a link from where we can evaluate your solution.

Reference:

- YouTube data v3 API: https://developers.google.com/youtube/v3/getting-started
- Search API reference: https://developers.google.com/youtube/v3/docs/search/list
    - To fetch the latest videos you need to specify these: type=video, order=date, publishedAfter=<SOME_DATE_TIME>
    - Without publishedAfter, it will give you cached results which will be too old

Feel free to ask any questions you have!

All the Best! Looking forward to meeting you on the other side!