Kalvium

Backend task

This task will ensure you have the skills needed to build full-stack web applications.

Build a server server that responds to mathematical operations sent via URL. it also maintains a history of the last 20 operations performed on the server.

Let's assume your server is at: localhost:3000. Here's some sample requests:

	GET request	Response
Endpoint	/	HTML Lists all the get endpoint samples you can demo (like below)
	/history	HTML Lists the last 20 operations performed on the server, and the answers.
Eg 1	/5/plus/3	JSON {question:"5+3",answer: 8}
Eg 2	/3/minus/5	JSON {question:"3-5", answer: -2}
Eg 3	/3/minus/5/plus/8	JSON {question:"3-5+8", answer: 6}
Eg 4	/3/into/5/plus/8/into/6	JSON {question:"3*5+8*6", answer: 63}
.. so on		

Above shows 3 operators. Implement as many as you can. As you can see the URL can be composed as large as possible.

The task will be scored on:
 a) How well the code is composed and written
 b) the amount of functionality added, and
 c) history of submissions (as viewed on github).
 d) The /history URL works even after a server restart

Submission: Submit via [form here](#).
Submit a) github URL, b) a recording on the loom of your app, and c) your resume.
Every working submission will be moved to the next round. You can keep the repo private and add in viewer access to "anilgulecha". Loom video can be public

Integrity policy: Should any plagiarism be detected the candidate will be unlisted from us, and partners.

Frontend task

This task sees your ability to reimagine, invent and design good usable components.

Imagine you're building an attendance system for a class. The entire students in a class will goto this UX, and mark their attendance.

Can you imagine the UI/UX for this, write a react project with the components and showcase it.

The task will be scored on:
- How user-friendly the components and UI/UX is.
- How well written the code is.
- How well explained the whole flow is.
- Github commit history and evolution of the app.

Submission: Submit via [form here](#).
Submit a) github URL, b) a recording on the loom of your app, and c) your resume.
Every working submission will be moved to the next round. You can keep the repo private and add in viewer access to "anilgulecha", or you can make the repo public. Loom video can be public

Note: there's no point copy pasting code for either tasks from google/github/elsewhere. We go through code in detail - so you're wasting your time if you're trying to game this process. We will go indepth into the code of everyone selected. These tasks are unique and are meant to check your creativity and problem solving skills.

1. In Depth Interview

All students selected from the above task will be interviewed. The interview will go over the code, the CS fundamentals, and previous development experience.

2. Culture fit and offer

Students who are selected will go through a HR interview, and be offered the role.