😇

Halo Take Home Project [5 hour]

> 🆘 If you have questions, please message Caine at (317) 693-0478.

Goals

Our goals are simple:

1. Help you decide if you want to join Halo as an intern

2. Make it obvious that you can set and achieve ridiculous goals

3. If 1 and 2 are true, make you super excited for the time ahead

Now that you've talked things over with Caine and Anhphu, we wanted to present you with your take-home project. The project spec is designed to be rigorous. This company will succeed only if the team makes it so, and our standard for excellence is always increasing.

Along with excellent executors, we are looking for excellent team members and first-principle thinkers. We strive to "pursue not the better, but the best", and we hope you will use these 4 hours to demonstrate you do too.

Your project is evaluated on outcomes: how interesting is the project you build and how do you put it into the world. Our standards for your project are ambitious, but we hope you will rise to the challenge.

> ⚠️ Completing the take-home doesn't guarantee an offer. We only accept a very small % of our overall applicant pool.

Project

> 🕐 Please follow the tasks in order. You're not expected to complete everything. Just get through as many tasks as you can :)
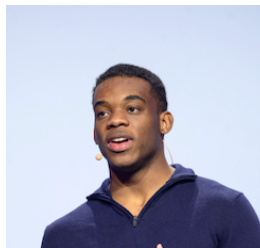
1. Create a database of 1,000 unique faces. You can source the faces however you like: web scraping, open datasets, selfie collections, AI generated, etc. The face should be stored as an image. For example:

1. Build a server endpoint using whatever backend/API framework you want.

   Input:

   an arbitrary photo, containing one face.
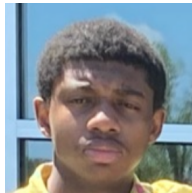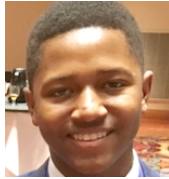

   Function:

   Search for the **top 5 most similar faces** in your database.

   Output:

   returns 5 of the most similar images to the input image, ranked by similarity

Example:

If the database includes a photo of you and your sibling, submitting a selfie should return you and your sibling as top matches—not strangers with unrelated features.

2. Take the system off of <u>localhost</u> (aka host the database and the server on the cloud). Provide a public URL where your API can be tested.

3. Allow the system to handle 20 requests per second with <2 second latency per request

4. Instead of a photo being sent to the endpoint, make it a continuous video.

Time limit

5 hours

Submission

At the end of the 5 hours, send an email to <u>founders@thebighalo.com</u> with a video of you walking through your progress. Please show proof, in the video, of each of the steps you completed. Also share the Github link.

Good luck.