Full-Stack Engineer Intern Assignment @ MagicSlides.app

We're looking for two full-stack engineering interns. The ideal candidates are recent grads or final-year students.

This is an intermediate-level assignment. It will test your technical and research skills.

Task Overview

You will build a web application that allows users to log in using Google OAuth, **fetch their last X emails from Gmail**, and classify them into different categories using OpenAI GPT-4o. By default, X = 15.

The application should provide the following functionality:

- 1. User Authentication: Allow users to log in using Google OAuth.
 - a. Take the OpenAl key from the user and save it in localStorage.
- 2. Fetch Emails: Fetch the user's emails from Gmail using the Gmail API.
 - a. You don't need to store them in a DB. After fetching the emails, you can store them in the user's local storage.
- 3. Classify Emails: Use OpenAl GPT to classify emails into important, Promotional, social, marketing, and spam categories.

Requirements

- 1. Frontend: Use Next.js or Remix, Tailwind, or any CSS framework of your choice
- 2. Backend: Framework's API routes or separate backend using Express.js, Koa, or Feather.js. and Langchain.js
- 3. Authentication: Use Google OAuth for user authentication.
- API Integration: Integrate with the Gmail API to fetch emails and OpenAI GPT for email classification.

Design

Here's a mockup of the design

Example Classifications

- Important: Emails that are personal or work-related and require immediate attention.
- Promotions: Emails related to sales, discounts, and marketing campaigns.

- Social: Emails from social networks, friends, and family.
- Marketing: Emails related to marketing, newsletters, and notifications.
- Spam: Unwanted or unsolicited emails.
- General: If none of the above are matched, use General

Submission

- Include a README file with instructions on how to set up and run the project.
- Ensure your code is well-documented and follows best practices.
- Once done share your github project with <u>@theindianappguy</u> & send email to theindianappguy@gmail.com
- Google has changed the verification process; now, you can't deploy an app without verification, so you need to add my email address theindianappguy@gmail.com theindianappguy@gmail.com as a test user.

Evaluation Criteria

- Code Quality: Clean, readable, modular, and well-documented code.
- Functionality: The application should meet all the requirements and provide the specified functionality.
- API Integration: Successful integration with Google OAuth, Gmail API, and OpenAI.
- User Experience: A user-friendly interface for interacting with the application.

Next Steps, Stipend, and Duration

There is one more technical round about the assignment implementation and web fundamentals.

We don't ask leetcode questions, so don't worry about them.

Duration: 4 months or more based on your performance.

Stipend: ₹15k-30k (5k-10k incentive based on performance)/month for three months. If we're a good match, we'll revise the stipend based on your performance.

The assignment is intentionally challenging. Since most candidates never complete assignments anyway, it helps us filter out the best candidates from those who applied.

If you have any questions, you can reach out to me on <u>Twitter</u>, <u>LinkedIn</u>, or via email at <u>jobs@magicslides.app</u>

Please don't just say "Hi, hello" and wait for a reply; write the complete message.

All the best 🤝