Note 1:

You have applied for a full-time, remote employment opportunity at BeyondChats.
In this role, you will work closely with our Product and Engineering teams on a
Laravel-based backend, ReactJS frontend, and NodeJS-based LLM systems.

While you'll have support from other engineers, this role requires a strong understanding of
multiple tech stacks and the ability to think independently about system design, trade-offs,
and real-world constraints.

To help us evaluate whether this role is a good mutual fit, we've designed the assignment
below. It's intended to give us insight into your problem-solving approach, hands-on
expertise, and engineering judgment.

You are welcome to use AI tools while working on this assignment. However, we care far
more about your thinking and execution than raw AI-generated output. Please avoid
copy-pasting unedited AI-generated code. Make sure your submission reflects your own
decisions and understanding - supported by AI.

If you have any questions or need clarifications, feel free to reach out to us at
support@beyondchats.com. In case you don't hear back from us, please use your
judgement to make decisions.

All the best,
Team BeyondChats

Note 2:

This assignment may feel time-consuming. That is intentional.

We expect you to spend **no more than 6 to 8 hours** on it. This may not seem like enough time to build everything perfectly, and that's intentional.

You may be applying to many other places as well, you may not have much time to allocate to this assignment.

We are interested to see how you approach the problem under these constraints:
how you break it down, what assumptions you make, what you choose to prioritise, and what you consciously decide to skip.

Partial completion is completely acceptable. How you approach the assignment and how you implement it matters more than finishing every requirement.

As you work on this assignment, your problem-solving ability, hands-on expertise, coding style, and comfort with modern tools (including vibe coding) will naturally become evident.

This assignment is not for everyone, and that's okay.
We are looking for engineers who enjoy building reliable systems, even when time and motivation are limited.

If that sounds like you, we'd love to see how you work.

Looking forward to reviewing your submission.
All the best.

Your Task

Your task is divided into 3 phases.

Phase 1: (Moderate Difficulty)

Scrape articles from the last page of the blogs section of BeyondChats.
(You can fetch the 5 oldest articles)
URL: https://beyondchats.com/blogs/

Store these articles in a database.

Create CRUD APIs in a Laravel project for the articles you stored in the database.

Phase 2: (Very Difficult)

Create a NodeJS based script / project.

Fetch latest article from the newly created laravel API

The script:

- Searches this article's title on Google.
- Fetches the first two links from Google Search results that are blogs or articles published by other websites.
- Scrapes the main content from these two articles you found on Google Search.
- Calls an LLM API to update the original article and make its formatting, content similar to the two new articles that were ranking on top of Google.
- Publish the newly generated article using the CRUD APIs created in previous Phase.
- Make sure to cite reference articles (that you scraped from Google Search results) at the bottom of the newly generated article.

Phase 3: (Very Easy)

Create a small ReactJS-based frontend project that fetches articles from the Laravel APIs and displays them in a responsive, professional UI. (The original articles as well as their update versions)

Submission Guidelines

- Partial work is OK.
  We do not expect everything to be perfect.
  We will evaluate you based on the following criteria:
  - Completeness -> 50%
  - ReadMe & setup docs -> 25%
  - Live Link -> 15%
  - Code Quality -> 10%

- One monolithic git repo which contains your code for all the various projects (Laravel, NodeJS, ReactJS).

- Please make sure your repo also includes a ReadMe file with the following details:
  - Local setup instructions.
  - Data flow diagram / Architecture diagram to quickly get a summary of the entire project.
  - A live link for your frontend project where we can check the original article as well as the updated article.

- Make sure your git repo is publicly accessible so our team can review your submission.

Note:

- Please make the submission before the due date. **(Thursday) 25 Dec, 11:59 pm IST.**

- Your code is your property and we promise to not use any part of your submission unless we select you for this employment opportunity.

ALL THE BEST!