Lead Engineer, Paired Programming Task

The Aim

In our paired programming task, we would like you to build a customer-facing API with an endpoint that retrieves data from the provided database.

Time 2 hours

Aim for no more than two hours on this. While we do want some design elements and styling, we're not looking for a fully completed project. Show us what you can do and tell us what you would have done with more time.

Specification

Imagine you work for a climate technology company that provides tools and insights, including carbon credit ratings. The company's data platform contains a wide range of data points for these ratings, including environmental impact, certification details, and more. Clients use a customer-facing API to retrieve specific features of these carbon credit ratings for analysis and decision-making.

In this task, we have provided you with a database. You must build an API and serve the data from the table through one endpoint. Following this, you will have an interview where we will go through your code with you and extend it. With this in mind, please also spend some time considering what you would have done if you had had more time, and come to the interview ready to discuss this.

Sample data dictionary

Column	Type	Description	Constrains
id	TEXT	UUID v4	UNIQUE
url	TEXT	Registry Project URL	
status	TEXT	Project status	
country	TEXT	Project country	
Note:			

Lead Engineer, Systems Design Task

Problem Context

At Sylvera, data is the heart of what we do. In the tech team, our objective is to quickly develop new data products and surface them to our customers. Our products are accessed via our web application as well as customer API integration.

In this task, you will design an API that serves both a web application and our customers directly, serving data that is stored in our data platform. Data will need to be able to be permissioned based on a combination of endpoints, data fields and subscriptions. We will be using Miro for this task and nothing specific to prepare in advance of the session!

This brief is intentionally high level, please ask questions to your interviewers to help your understanding of the problem context.

Talk through your decisions and what any benefits/ drawbacks may be.