Technical assignment

Senior Ruby on Rails Developer

Before you start:

Don't spend more than an evening on this assignment. We want you to illustrate your problem-solving process and do not need to see complete solutions.

Good luck!

Integrating a Web3 login with a Rails backend

Background

Many Web3 apps are client-side Javascript apps that rely entirely on the blockchain to process and store data. Presail is a bit different. We use a combination of client-side Javascript to read from and write to the blockchain, but also have our own server and databases, like a traditional web2 app.

This hybrid approach is utilized in several places in our application, including the login-system, where we use the Wagmi JS library to connect to the user's wallet, and request that they sign a server-generated message with their private key to authenticate their wallet and establish a login session.

Task

Part 1: Make a simple Ruby on Rails app that allows users to authenticate and create a server session, using MetaMask to authenticate users with the Rails backend. You may fork our JS login demo (https://github.com/datablock-ai/login-demo) or just use it for inspiration on how to connect and integrate MetaMask. Re-using parts of the code is highly recommended, to save yourself some time.

You may use any gems or JS libraries you want, including libraries for session management, like Devise.

You can also see our login system in action in production at https://app.presail.com/ for additional inspiration on how a finished system can look. Can you improve on it?

Part 2: What are the key elements to test in the login app you made? If you have time, you may write the actual tests. If not, it is sufficient to write about the approach you would take to testing, which elements you think it's critical to cover – and which type of tests you would use. In any case, we're not expecting 100% coverage!