

Senior RoR Back-end developer assignment

Objective

Develop a comprehensive App interface and API that fulfills the following specifications:

Technology Stack

- Utilize Rails 7.x with Ruby 3.1 for efficient development.
- Employ PostgreSQL as the database management system for robust data handling.
- Ensure API responses are formatted in JSON / JSON API to facilitate seamless integration.
- Implement Rspec for rigorous and automated testing.
- Enforce database integrity through the application of DB constraints and appropriate foreign keys.

Functional Requirements

1. User Authentication:
 - Enable user registration and login using email credentials.
 - Preload default accounts through a seed mechanism.
2. Brand Management
 - Facilitate the addition of brands with the ability to define up to 5 customizable data fields for each brand.
3. Product Management:
 - Provide the capability to add, update, and delete products associated with brands.
 - Support up to 5 customizable data fields for each product.
 - Mandate inclusion of a price value for products, accommodating various currencies.
4. State Management:
 - Allow the manipulation of brand and product states, encompassing "active" and "inactive" options.
5. Client Management:
 - Enable the addition of clients with the option to define authentication credentials and payout rates.
6. Product Access Control:
 - Empower clients to specify accessible products for their accounts.
7. Card Issuance and Management:
 - Provide clients with the ability to request new cards for products.
 - Upon issuance, furnish clients with a unique activation number and an optional purchase details pin.

8. Card Cancellation:
 - Allow clients to cancel previously issued cards as needed.
9. Reporting:
 - Support the generation of comprehensive reports encompassing spending and card cancellation activities.

Technical Requirements

1. API Development:
 - Develop a robust API using the Ruby On Rails framework to ensure a structured and maintainable codebase.
2. Authentication System:
 - Implement a secure authentication system to safeguard user accounts and sensitive operations.
3. Version Control:
 - Maintain a version-controlled repository on GitHub to facilitate collaborative development and code management.