SE III Take-home Exercise

The purpose of this take home exercise is to learn how you break down a big problem, and implement a solution that you see fit. You'll be provided some base requirements below, the implementation, design, and patterns you use are all up to you. You'll be judged on:

- Readability, performance, and maintainability of code
- Unit test coverage
- Approach to solving the problem
 - Schema design
 - o API design
- Fulfilling requirements
- Other things we expect:
 - Any documentation, diagrams or comments you think are important to include for context on your approach, or future plans for the service
 - o A README for your repository including setup/installation instructions

Note: Feel free to use whatever language, technology you are comfortable with. This is meant to evaluate your approach, not the end product. We do not expect you to spend more than 1 - 2 hours for the exercise. If possible, please host your end product on Heroku, or a similar service so that we can access your API. They offer free plans for hosting a server and databases.

Prompt

We have a number of clients that we serve. They're scattered across the country, and we want to keep track of them in a central dashboard. We want to be able to manage the clients that we serve, and the members that are part of their organizations. Design, and write a service that fulfills the following requirements:

User Story	Acceptance Criteria
As a sales admin, I want to Add, Edit, and Delete clients so that I can manage their details	 Client fields: Company name Date created Address City State Zip Headcount

	○ Public/Private
As a sales admin, I want to search for clients by name, or State so that I can find the right client to engage	 Given a string for name, api endpoint returns list of clients that match a fuzzy search Given a string for state, api endpoint returns a list of clients operating in that state
As a sales admin, I want to manage members associated with the clients so that I know contact the right people	Member fields:Member nameMember phone numberEmail
As a sales admin, I want to be able to move members between clients so that I can keep track of them	
BONUS: As a sales admin, I want to add notes to a member's file so that I can be reminded of them when I'm reaching out	Each note stored as a stringNotes are timestamped