Real Estate Listing API

Write an api that can be used to track sample real estate listing data. Create a simple database that can hold listing data(mls_number, address, listing date, price, agent, etc). The api should be able to:

- create new listings
- retrieve listings (get by mls number, agent, etc)
- update listing data
- remove listings by mls number

What is a listing?

A listing is a record of a particular piece of real estate property being offered for sale (or rent) for a particular asking price. A listing contains many pieces of information normally, but for this exercise, we just want to see that you have enough fields to demonstrate the general ideas of the API you are building. At a minimum, a listing should have:

- An "MLS Number" (some value to identify this particular listing)
- An Address, City, State/Province, and Postal Code (you only need to worry about US addresses, or USA and Canada for an extra chall
- An "asking price" (in US currency)
- A "listing agent" (a reference to the real estate agent responsible for this listing -- every listing has at least one listing agent, but for the sake of this exercise, you can assume that every listing has exactly one listing agent)
- A listing may have many photos

What is an agent?

An agent is a person who is a professional, licensed real estate agent. They can create listings for a particular property. There is a lot of information that we normally track about real estate agents, but for the sake of this exercise, we just want some basic information, like a name, and various forms of contact information, and an "agent id" that would be assigned by our system.

Notes

- We are interested in the code that you write. You're encouraged to utilize 3rd-party libraries, etc., but make sure that you make clear which code is written by you, and which code was written by someone else, or directly inspired by someone else's code. Plagiarism is grounds for automatic disqualification.
- Make the code available via Github. The readme should have clear instructions on how to set up the api so we can test it. The project should be able to be built on a *nix system.
- You may pick the tech you use to implement this project. A complete working example is most important, but internally we use GraphQL/Elixir/MySQL/Docker. Example, you can run mysql locally using docker with a command like this '`docker run -P3306:3306 -e MYSQL_ROOT_PASSWORD=topsecret mysql:latest`'.

Criteria for Success

- **Correctness** Does the live api work as requested? Do the required api endpoints work? Is data validated? Are errors handled?
- **Documentation** Include not only comments, but a thorough readme and any other relevant documentation needed to build the api running locally.
- **Testability** We are interested in seeing testable code. Extra consideration given to those that implement automated testing.
- **Maintainability** Is the code easy to understand? Your code should be easy for another developer to pick up and make modifications.