Job Hazard Analysis Application

For this challenge, you will be creating an application to assist Acme Widgets, Inc. with recording Job Hazard Analysis. This challenge is meant to be open-ended and should not be "tricky" by any means - so please reach out if you have any questions.

What is Job Hazard Analysis?

A JHA (sometimes called a JSA) is used by EHS professionals to record hazards that exist in the workplace as they correspond to specific tasks a worker would perform. Please read up to page 13 of this OSHA booklet for a more complete description of Job Hazard Analysis, including examples, or research on your own.

In general, as a safety manager at my facility, I might be expected to maintain a library of JHA records for each kind of activity that is performed at my facility. Each JHA should capture the activity under analysis and a collection of job steps, each of which has a collection of known hazards where each hazard has a recommended set of controls.

Here is a publicly available example of the paper-based JHA process from the risk management team at the University of Notre Dame.

The Problem

Acme Widgets is frustrated with their JHA's being on paper, and are looking for a paperless solution and have turned to you to digitize their JHA process. Create a web-based recordkeeping application to assist them with keeping an online database of JHAs.

Technical Requirements
- Must provide a RESTful API
- Must include a front-end UI allowing the user to record their JHAs
- (Optional*) Use PHP / Laravel
- (Optional*) Use VueJS

* Optional means optional. Please use whatever tools you are most comfortable with!

Notes

This challenge is left open-ended by design. We'd like you to be the product manager on this one and have fun with it! Please include a readme that illustrates the steps to run your submission.

Be prepared to demonstrate usage of your API with Postman, show your front-end, and discuss your code and decision making. This challenge should only take 4-6 hours, but you may spend as much time as you need. Please ensure your submission includes enough code for our team to evaluate your skills. We are expecting a complete, well-crafted, object-oriented solution to this challenge and hope to set the stage for you to show us your general prowess in architecture, testing, and other areas.

We're looking forward to seeing what you can do!