VOTE VAULT

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BALL STATE UNIVERSITY
COMPUTER SCIENCE

TECH STACK

- php
- Laravel
- PostgreSQL
- React
- Typescript

ACKNOWLEDGEMENTS

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Huseyin Ergin, Ph.D.

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FEATURES

Basic Inventory Management

- CRUD functionality to manage database contents

"At-a-Glance" Dashboard

- Quick inventory summary and relevant updates upon login
- Optional customization for different dashboard panel layouts

Page Walkthroughs

- Walkthrough feature for each page to assist users
- Highlights key areas and explains functionality

"Magic Link" Password Management

- Secure login via email link instead of lockouts
- Reduces user frustration and support requests

Dynamic Tables

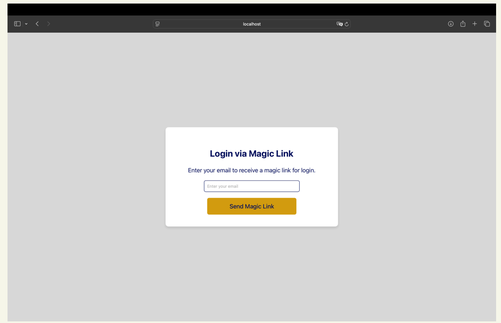
- Sortable columns, adjustable length, and filters
- Improves data browsing and usability

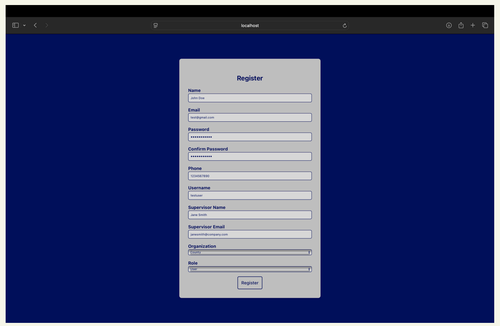
Bulk Inventory Management

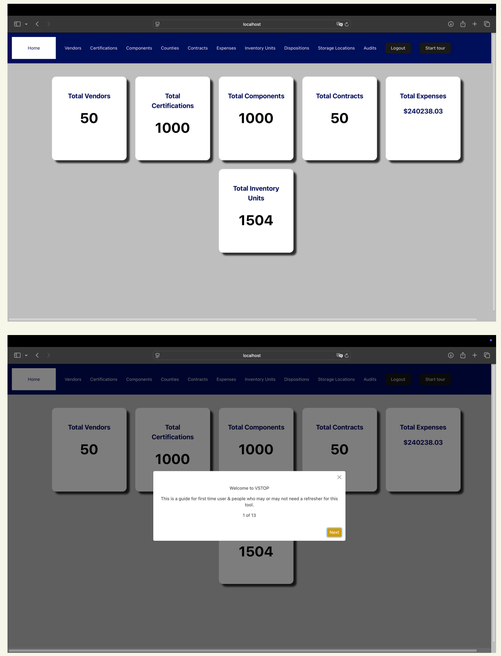
- Ability to edit or update multiple records at once
- Important for counties handling large equipment volumes

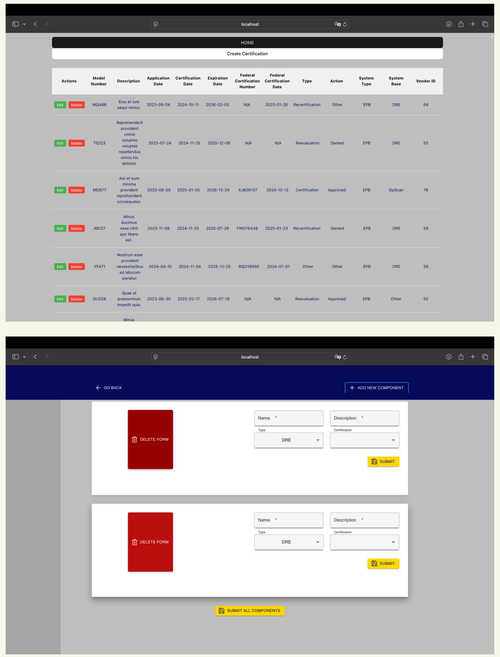
Static Reporting

- Public Test Lists: random component samples per county
- Random Audit Lists: 0.1% of statewide equipment









CLIENT & PURPOSE

VSTOP is a state-funded program that helps the Indiana Secretary of State manage election equipment inventory. A key part of this effort is the Election Systems Inventory (VSTOP-ESI), a centralized database maintained by county clerks and election officials.

This database is essential for running elections, supporting audits and certifications required before voting can occur. The goal of this project is to build a clear, user-friendly interface that's easy for developers to maintain and intuitive for users to navigate—especially since many end users, like county clerks, may not be tech-savvy.

CONCLUSIONS

The Vote Vault project provided invaluable experience working in a collaborative software development environment. We navigated the challenges of teamwork, learning to communicate effectively and share responsibilities while benefiting from collective problem-solving.

We also saw how software architecture impacts the user experience. Thoughtful design and clean code result in faster performance, smoother workflows, and a more intuitive interface, critical for non-technical users like county clerks.

In the end, Vote Vault taught us how to build software that's both scalable and user-friendly, demonstrating that behind-the-scenes architecture is just as important as the user interface.