# Gourd Guardian

## Jack-o-Lantern Tracker

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## Introduction

*Problem*: During the preparation for the ***Spirits in the Garden* halloween event**, the Reiman Gardens volunteer admins use a spreadsheet to keep track of stencils and their status. **Constantly maintaining this spreadsheet results to increased complexity and impedes their efficiency.**

*Solution*: **An application for comprehensively managing stencils.**

*Intended Users & Uses*

1. ***Volunteer admins*** to update stencil status, manage stencils, and search stencils.
2. ***Volunteers*** to update stencil status during event preparation.

## Design Requirements

*Functional Requirements*:

The web app must allow ***volunteer admins*** to...

- ***Search stencils*** using their code
- ***Edit stencils*** info (name, category, code, pdf)
- ***Sort or categorize stencils*** by year, status, category
- ***Select stencils*** that will be used a specific year/week

The web app must allow ***volunteers*** to...

- Input stencil code to show a stencil
- Click a button to start or end the current stencil process—from or to tracing or carving.

*Nonfunctional Requirements*:

- Stencil search and updates must be within ***1-2 sec***
- There should be a ***secure login*** for admins

*Constraints*:

- The app must be accessible through a ***mobile or desktop browser***

## Design Approach

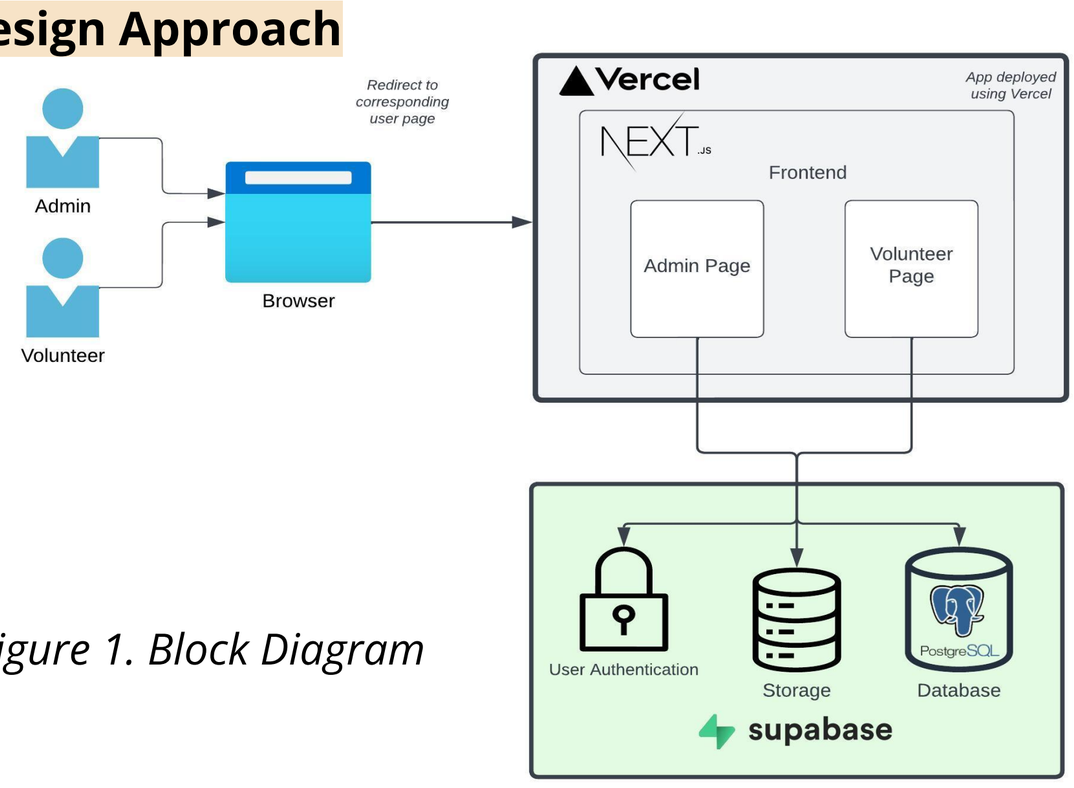


*Figure 1. Block Diagram*

## Technical Details

Technologies used:

- *Next.js* – Development framework
- *Vercel* – Deployment
- *Supabase* – Database management
- *Git* – Version control

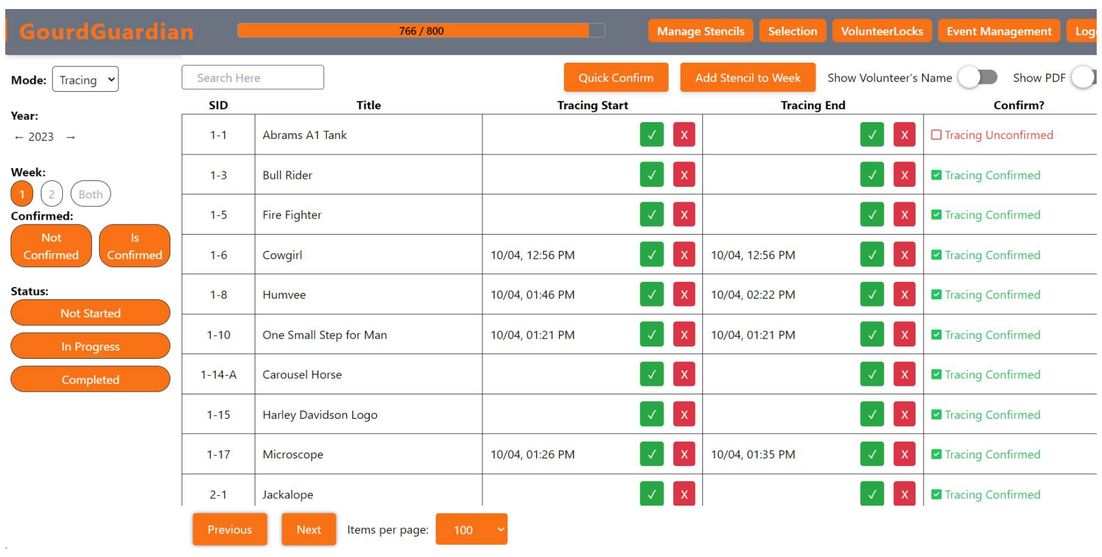


*Figure 2. Stencil event management. This screen allows admins to search, filter stencils and confirm/update their status*

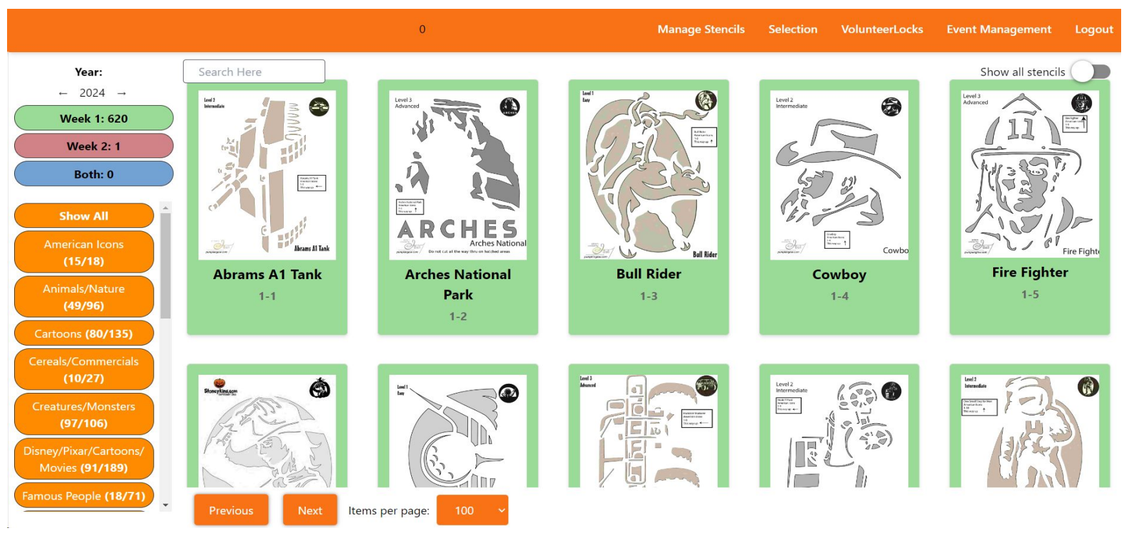


*Figure 3. Stencil selection. This screen allows admins to select stencils for a selected year*

*Figure 4. Volunteers use the app to select stencils for next year*

## Testing

- *Manual integration and functional tests* were done during development
- The app was used and tested by volunteers and admins during the event preparation. Bugs that were found during this process were fixed.

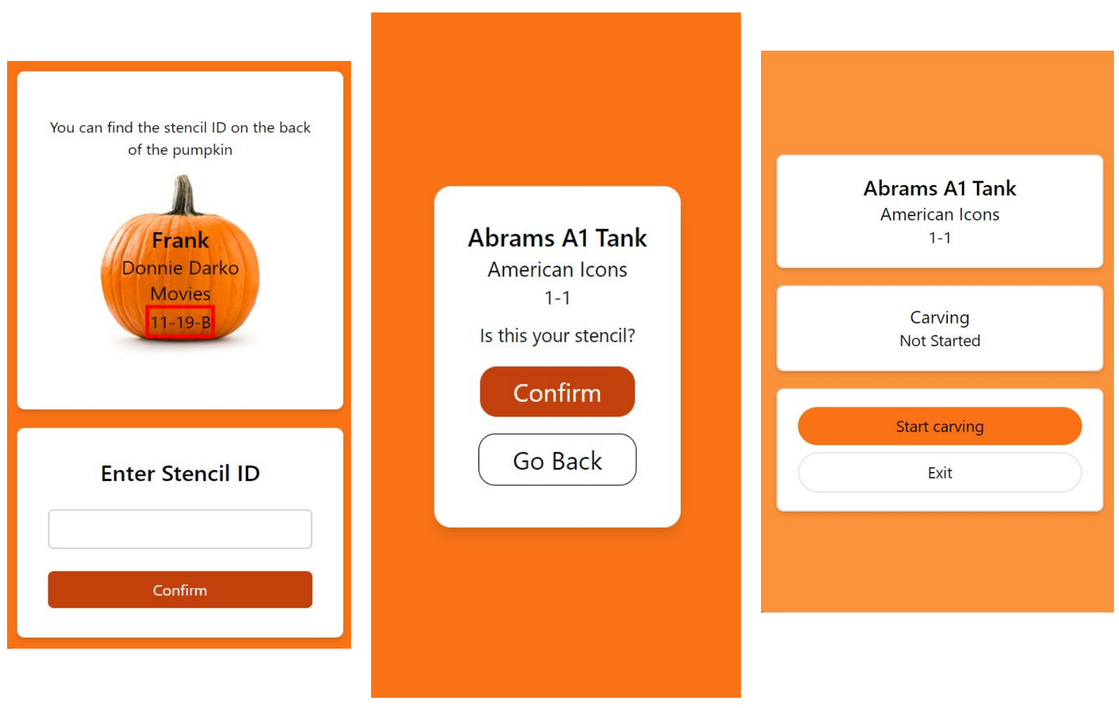


*Figure 5. Volunteer screens which allows them to update the status of stencils they're working on during the event*

## Standards

W3C best practices for mobile web app