



S E 4 9 1

Lightning Talk

Jack-o-Lantern Spirits in the Gardens

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Design Context

Broader Context

- Public health, safety, and welfare
- Global, cultural, and social
- Environmental
- Economic



Design Context

User Needs

- Volunteer Admins
- Volunteers
- Visitors



Design Context

Prior Work/Solutions

- A previous CS senior design project.

Technical Complexity

- Frontend and Backend
- AI camera to recognize stencils



Design Exploration

Design Decisions

- Using React with Next.js for frontend/backend development.
- MySQL will be used as a database management system.
- Extending the app's intended users to include volunteers.
- Developing web application over Android or iOS native application



Design Exploration

Ideation

- Using React with Next.js for frontend/backend development.
 - ❖ React with Next.js
 - ❖ Angular
 - ❖ Vue.js
 - ❖ Django with Python
 - ❖ Ruby on Rails



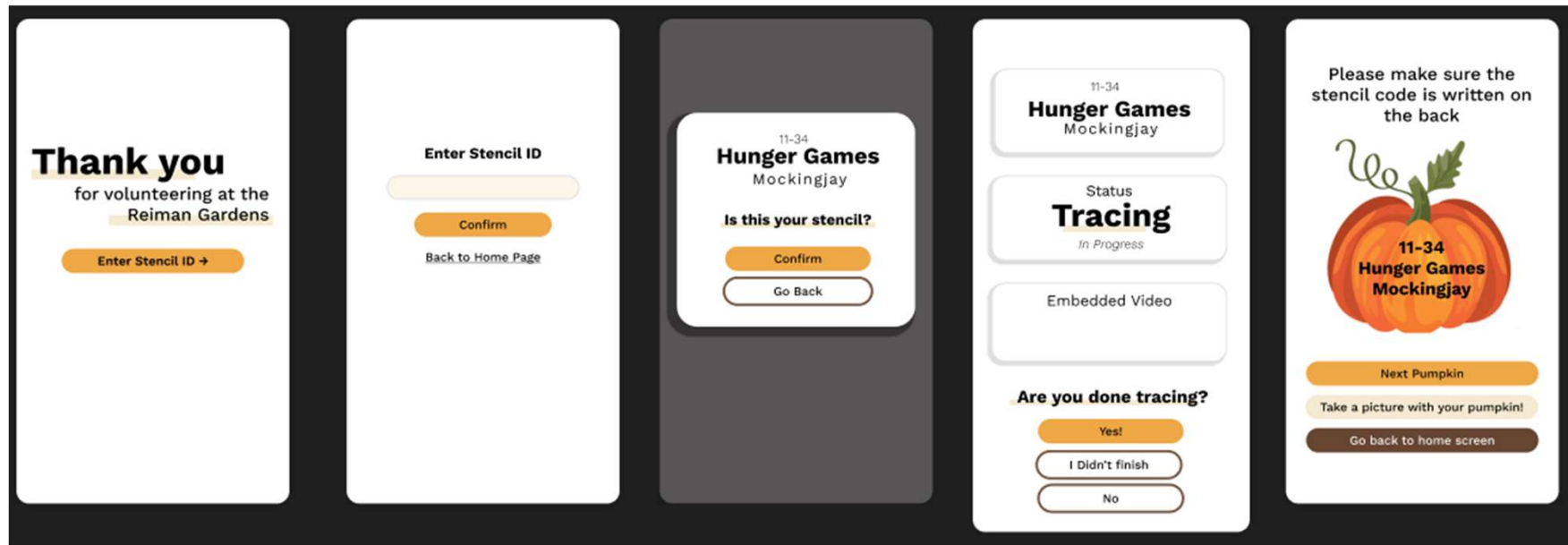
Design Exploration

Decision-Making and Trade-Off

Option	Popularity and Community Support	Ease of Use and Learning Curve	Performance and Scalability	Features and Capabilities	Compatibility with Other Technologies	Team's Familiarity	Total Score
React with Next.js	5	4	4	5	5	4	102
Angular	4	3	3	4	4	2	74
Vue.js	4	4	3	4	5	3	85
Django with Python	3	4	4	3	4	2	74
Ruby on Rails	3	3	3	3	3	1	59

Proposed Design

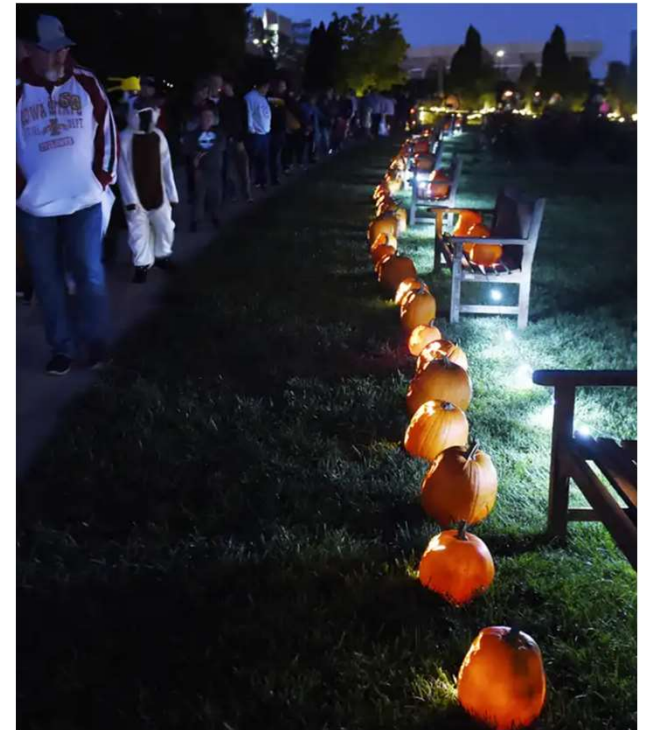
Design Visual and Description



Proposed Design

Functionality

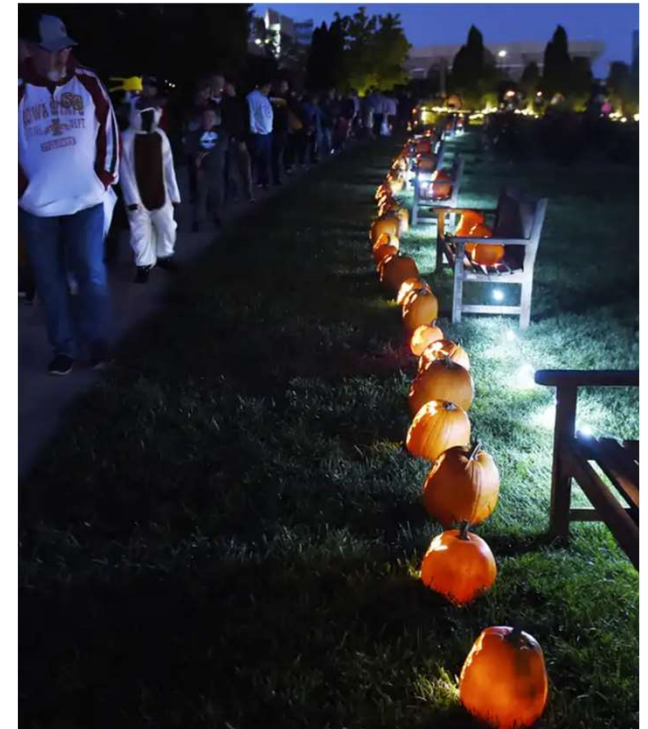
- Stencil management for admins
- Stencil logging for volunteers
- Stencil recognition for visitors.



Proposed Design

Areas of Concern and Development

- Primary concerns
- Immediate plans to address the concern
- Questions for clients, TAs, and faculty advisers



Frightful and Delightful,

it's a
big

thank you!

