How Design Systems Lead to Accessible and Secure Applications

With the increasing complexity of digital products, it has become more challenging to create secure and accessible applications while also delivering a consistent user experience across platforms and brand touchpoints, all at scale and acceptable speed. Design systems provide a solution to manage this complexity by defining a set of reusable components and practices that serve as the single source of truth for design and development. By design and definition, design systems also play a crucial role in ensuring the accessibility and security of applications. They achieve this by

1. Minimizing the number of dependencies, providing maximum control over the application.
2. Offering standardized components optimized for accessibility.
3. Implementing secure coding practices to create robust components and reduce vulnerabilities.
4. Incorporating a collaborative feedback loop.
5. Leveraging human-centered design (HCD) to enhance system trustworthiness.

References

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Central: Design Systems help ensure **accessible and secure** applications.

Managing Dependencies
- Regular vulnerability scans
- Regular dependency checks
- Locally-hosted mirror

Implementing WCAG Compliance
- Color & Tonal Ranges
- Surface Layering Model
- Autosuggest
- Content Distinction
- Input Assistance
- Screen Readers
- Keyboard Accessibility
- JAWS
- Keyboard Selects
- Tab Order

Minimize Cognitive Load
- Danger Buttons
- Lists
- Toasts

Leveraging HCD to Enhance Trustworthiness
- Badges
- Icons
- Inform users about security and status
- Auto-completion
- Confirmation dialogues
- Help users make decisions
- Undo functions
- Validation checks

Implementing Secure Coding Practices
- Use Static Code Analysis
- Linting Software
- Unit Tests
- HTML & JavaScript Best Practices
- Prevent target blank vulnerability
- Prevent Cross-site Scripting (XSS)
- Typescript
- Standardized and Shared Properties
- Sizes
- Kinds
- Types
- Variants

Incorporating a Collaborative Feedback Loop
- Dedicated Documentation Platforms
- Roadmaps with Expected Checkpoints

Edit
Duplicate	1
Edit	2
Delete	3

Delete   Remove

⊘ Danger
Uh-oh, that didn't work.

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