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UX Case Study

April 2025

Agenda

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- Outcome
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Project Overview

Client: Benelizer

Stakeholder:
Erik Maltby – Experienced entrepreneur with a background in enterprise software and strategy execution.

Timeline: ~10 working days

Introduction:
I collaborated with Benilizer on a complete front-end redesign of their internal web app. The challenge: rebuild the UI to meet AAA accessibility standards, maintain compatibility with their existing backend, and do it all **without JavaScript** — using only HTML and CSS.

The Challenge

- **Accessibility:** Initial design components failed WCAG checks.
- **Tech constraints:** The backend had to remain untouched, so no JavaScript could be used.
- **Performance:** The new front-end had to be lean — minimal markup and optimized CSS.
- **Consistency:** A scalable design system was needed to empower both design and development workflows.
- **Visual alignment:** The new design needed to be clean, modern, and familiar to users.

Discovery & UX Research

To understand user behavior and technical limitations, I:

- Conducted a **design audit** of the current interface — none of the components passed WCAG standards.
- Created **personas** representing key user types, along with their devices and browsers.
- Based on demographic insights, we learned that **the dominant user ecosystem was Google Workspace, not Microsoft 365.**

→ We leveraged Material Design principles to align with users' existing habits and expectations.

Design & Development Approach

Accessibility First

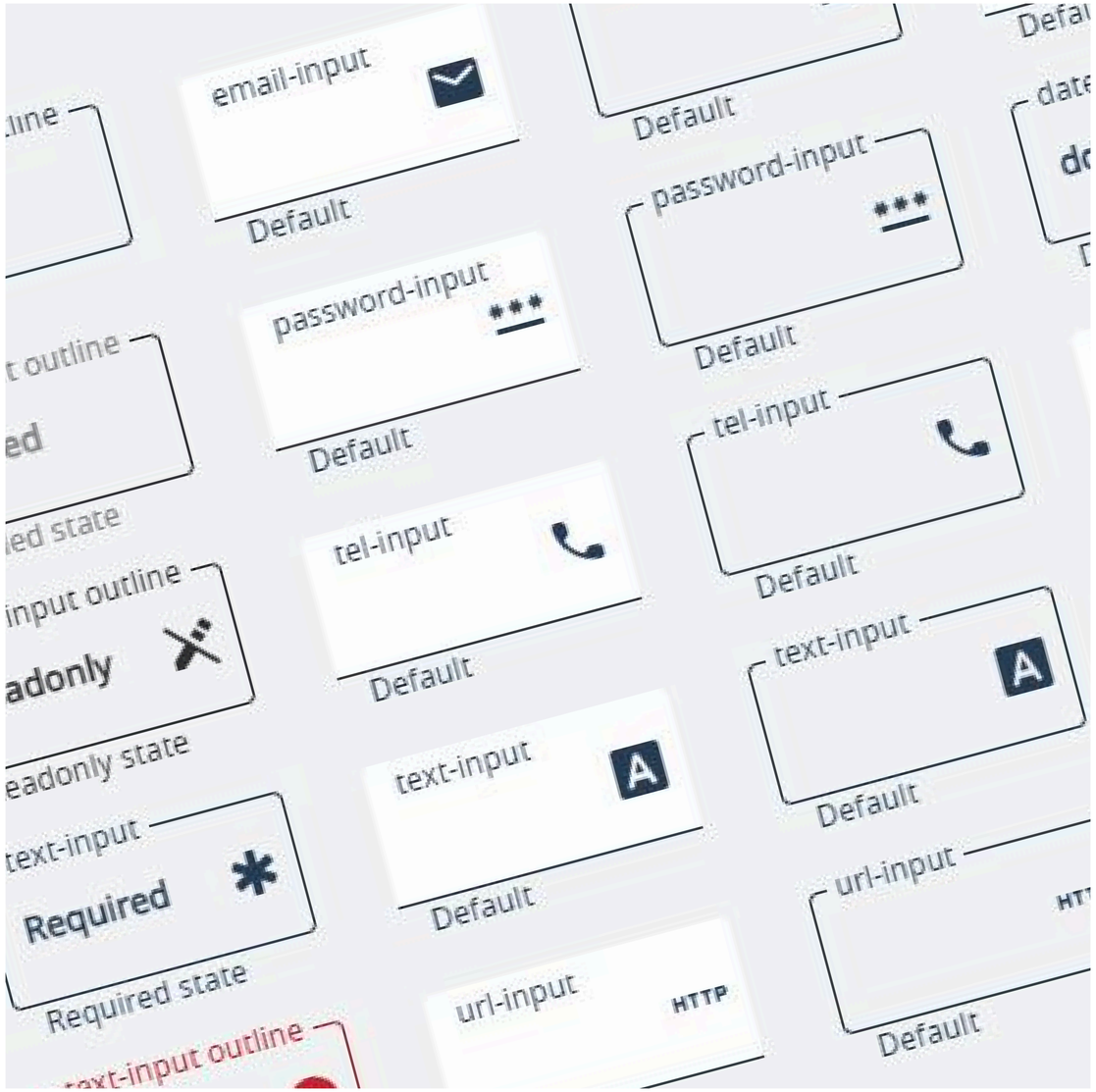
- Used semantic HTML5 elements and native form validation.
- Achieved **WCAG AAA** compliance.
- Ensured compatibility with screen readers and keyboard navigation.

Front-End Framework

- Built a responsive, modular front-end framework from scratch using **only HTML and CSS**, based on **Flexbox**.
- No JavaScript was used — a true **separation of concerns**.
- Used **pseudo-elements** to simulate Material Design-style interactions, e.g. ripple effects, form styling, tooltips.

Components & Design System

- Created a **Figma design system** to mirror the coded component library.
- Built a **custom icon font** to meet specific brand and UI requirements.
- Structured the framework to allow **developers and designers to work in parallel**.



Visual Direction

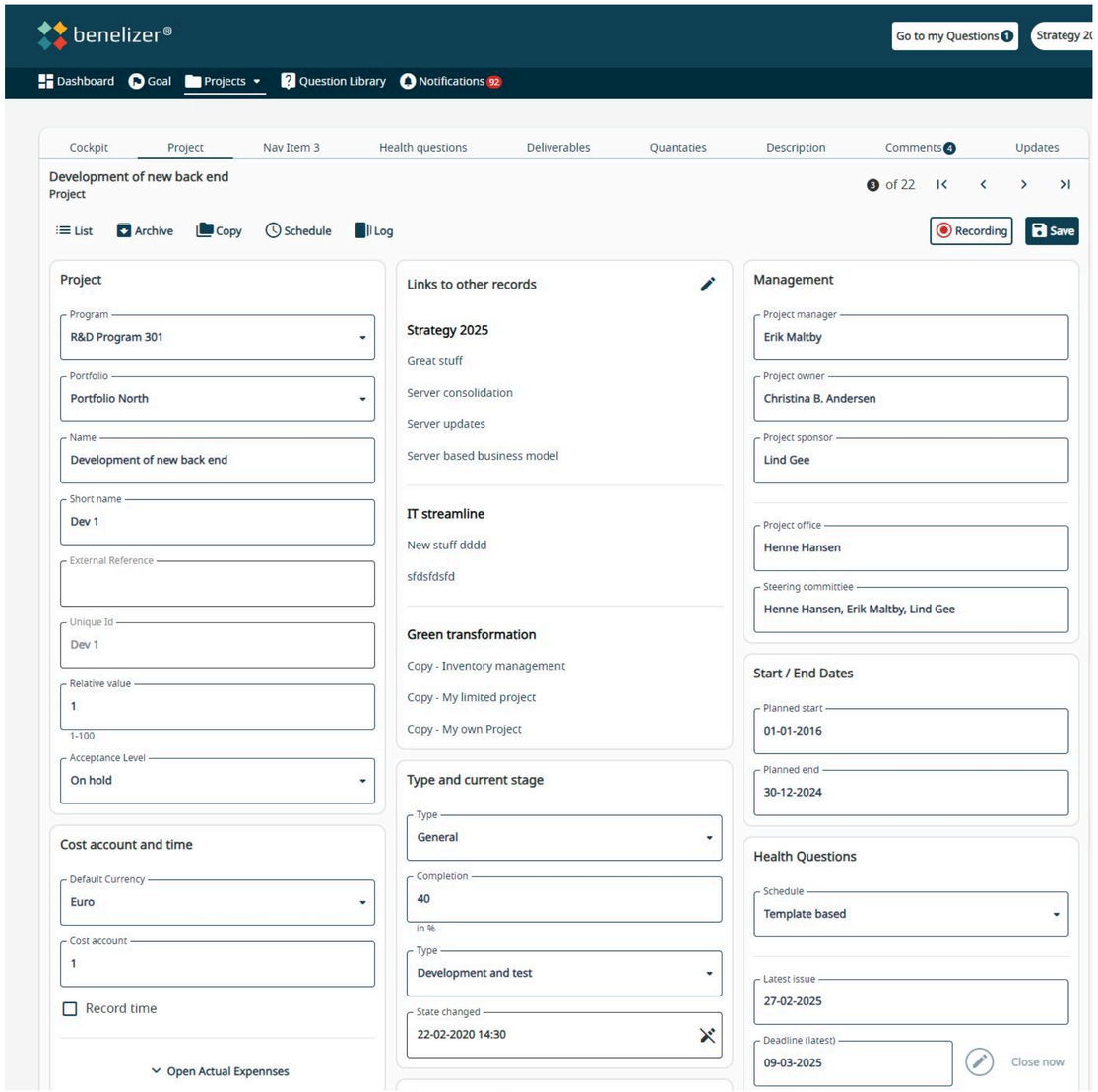
The visual style was:

- **Modern and minimal**
- Inspired by **Material Design**
- Optimized for readability, contrast, and familiar interaction patterns

This direction was chosen deliberately to reflect the ecosystem users were most familiar with — Google Workspace.

Outcome

- All UI components passed **WCAG AAA accessibility** tests.
- Delivered a fully functional **front-end framework with zero JavaScript**.
- Introduced a reusable, maintainable **design system** in both code and Figma.
- Improved collaboration between design and dev through clear structure and modularity.
- Executed the entire project **within ~10 working days** — from audit to delivery.



🚀 Key Learnings

- **Constraints foster creativity:** Building a modern UI without JS demanded smarter use of native HTML and CSS.
- **User context drives design:** Designing for Google-native users led us to Material Design patterns — resulting in intuitive interfaces.
- **Involving stakeholders keeps projects grounded:** Erik’s clear goals and technical insight helped balance ambition with feasibility.
- **Design systems empower autonomy:** By matching Figma and code, teams can design and build independently — without confusion or misalignment.