Inventory Management System

Features

- Dashboard
- Manage companies
- Manage locations
- Manage employees
- Manage devices
- Search functionality
- Filters
- Sorting
- Bulk operations
- Notifications
- Audit logs

DISCOVERY

BACKGROUND

Kinetic has an existing inventory manager that organizes its hardware devices, often used to assign a device to a user. The project included redesigning their inventory manager using an approach that performs well for operations engineers to assign, unassign, and monitor hardware devices.

The inventory manager consists of two sections: client manager and device inventory. The client manager lists the active and deployed devices known to companies, which can be edited or deleted, and allows for new devices to be assigned. The inventory section consists of items that still need to be assigned.

RESEARCH GOALS

- What components of the old design are helpful to keep, and which ones - should be removed?
- What do operations engineers look for when managing these devices?

INTERVIEWS

We conducted existing stakeholder interviews and internal tools. We interviewed operations engineers who use the inventory manager to assign devices to new hires. Many of the tasks listed were app-through-the interface and guide a lot of them have they use or workarounds. We also interviewed engineers who use the inventory manager to find the available devices and the assigned ones regularly.

Interviewee	Role	Frequency	Notes
Operations Lead	Ops	Weekly	Bulk assign is the most frequent task
Ops Engineer A	Ops	Weekly	Uses spreadsheet workarounds for bulk operations
Ops Engineer B	Ops	Monthly	Prefers keyboard shortcuts
Support Manager	Support	Weekly	Needs to see device history quickly
Support Agent	Support	Daily	Looks up device by serial number
IT Admin	IT	Monthly	Audit log is critical for compliance
Hardware Technician	Hardware	Weekly	Needs to see which devices are in stock
Hardware Lead	Hardware	Monthly	Wants to see aging inventory

DEFINE

SKETCHES

Since this was mainly an redesign a lot of time spent in sketches and a digital wireframe with a fully functional prototype. The sketches focused on the layout of the client manager and the device inventory, and arrangement different types of elements and ways we could a consistent interface across the two sections. The sketches were also tested with the operations and customer engineers.

Forms

- The top component consists of breadcrumbs to show the user's current place.
- The form is broken into sections with a title and a subtitle.
- All fields are accompanied by a label and a hint.
- Mandatory fields are marked with an asterisk.
- The form has a sticky footer with the action buttons.
- Fields are grouped by the data they are editing changes.

Tables

- An accordion is used but for showing the assigned within the table list.
- The table has a sticky header and sticky footer.
- The action on the table is based on the properties of the table's category.

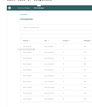
USER FLOW

Since there are two sections, there are two main flows:the the client and the other one for the device inventory. The client flow includes creating a client, editing existing and deletion. The device inventory includes and deletion. The deletion flow is the same for both. The client flow includes the ability to assign devices to the client and unassign them. Devices, there are connected and disconnected devices. A disconnected device can be deleted.

DESIGN

SYSTEM DESIGN

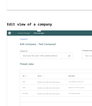
Here the scale of the components used for the final design. There are different types of components, such as forms, tables, and modals. Each component has a specific use and implementation. The goal of the UI was to make it easy to use, easy to read, and consistent across the system.



FINAL DESIGN

For the final design, there are a total of 8 pages, which consists of the company list, company edit, company location list, location edit, location employee list, employee edit, employee device list, and unassigned devices.

List view of companies



Edit view of a company

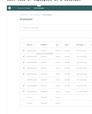
List view of locations in a company

Edit view of a location in a company

List view of employees in a location

Edit view of an employee in a location

Add view of an employee in a location



List view of available devices in a location

List view of unconnected devices in a location