### TKS COMMUNICATION

UX Designer: Steve Berkey

WELCOME

### Overview

### THE PRODUCT

The Kilmore School (TKS) is a fictional school based on the needs of an actual all-boys boarding school. There are many moving parts to make a boarding school work smoothly. Communication is imperative. The TKS Communication Portal is a desktop and mobile solution to ease the communication pains of TKS.

### PROJECT DURATION

January 2022 to February 2022

WHAT TO SOLVE

### Overview

### THE PROBLEM

TKS includes many professionals working together to make each day flow smoothly. The following staff have to communicate effortlessly, but not all staff needs to receive all communication:

- Educational administrators
- Teachers and assistants
- Mental and occupational therapists
- Clinical administrators
- Residential administrators
- Residential staff
- Headmaster and Assistant Headmaster
- Groundskeeping and handyman crew
- Parents

Currently, most of the current communication is done by email.

### THE GOAL

A solution was needed to streamline communication, provide adjustable permissions for viewing, and a modular design to accommodate growth.

ROLES AND RESPONSIBILITIES

### Overview

MY ROLE

UX designer designing an app for TKS

Communication Portal from conception to delivery.

#### RESPONSIBILITIES

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, and iterating on designs.

# THE USER

User research

Personas

Problem statements

User journey maps



## User Research

#### BEING USER-CENTRIC



I interviewed four staff members and one of the parents of the students attending the school to learn about relevant details needed to create an online communication platform. Following the interviews, empathy maps and personas were created.

This research indicated that the staff of TKS and parents felt overwhelmed with using email as their current communication platform.

USER RESEARCH

### Pain Points

**O1**TIME

Parents and staff are overwhelmed with time-consuming emails. Parents are concerned they'll miss the details, and the staff have difficulty keeping up with all of the details.

02

### SEVERAL SIMULTANEOUS CONVERSATIONS

The administrative staff expressed concern about follow-through. As an administrator, it's challenging to maintain several conversations and ensure that the staff complete their jobs, be current with new updates, and submit forms and other job responsibilities on time.

03

#### **MARKETING**

One teacher and other marketing staff must organize and manage photos from everyone on the campus. By everyone having the ability to catch candid moments, natural highlights are captured each day on the school campus. However, sending these images by email and not having universal media storage makes it difficult to manage post-production.



Assistant Headmaster

### Sara (43 yo)

Sara manages communication between the parents, the residential staff, and the educational staff while balancing her long list of other responsibilities.

"I feel as if I'm constantly tied to my email, often having to keep things organized in my head."

PARENT

### Mitch (54 yo)

Mitch is a parent. He works long hours as a financial advisor and as a stockbroker. He often feels bombarded with multiple emails from the school while managing work emails throughout the day.

"I wish I could clone myself, but I'm unable to keep up with all of the emails and feel as if I miss some of the details."



USER RESEARCH

### Journey Map

### FOLLOWING SARA'S JOURNEY

Mapping Sara's user journey revealed how it would be helpful to have an online communication portal to streamline communication.

#### Persona: Sara (Staff Communication)

Goal: Streamline communication to staff and parents to permit more time for other admin tasks.

ACTION	Email meeting agenda, memos, and office documents (e.g., field trip permission slips) to staff	Respond to individual staff needs that are identified in professional development (e.g., behavior management)	Email staff forms to be completed with reminders	Provide updates individually to staff	Update staff who is out and coverage
TASK LIST	Tasks  A. Update documents B. Save to drive C. Email to individuals	Tasks  A. Respond to email or texts B. Reference resources C. Respond back to individual	Tasks  A. Design form B. Save to drive C. Send to individual staff D. Remind staff multiple times to complete	Tasks  A. Update or design documents B. Save to drive C. Send to staff as group or individual emails	Tasks  A. Text person in need of information B. Respond to text
FEELING ADJECTIVE	Feels too time consuming for task	Frustrated by time constraints	Annoyed by frequent reminders	Feels too time consuming for task	Feels too time consuming for task
IMPROVEMENT OPPORTUNITIES	Provide one location that is viewable based on permissions.	Provide one location that is viewable based on permissions.	Provide one location that is viewable based on permissions. Include reminders when not completed.	Provide one location that is viewable based on permissions.	Provide one location that is viewable based on permissions.

Paper wireframes

Digital wireframes

Low-fidelity prototype

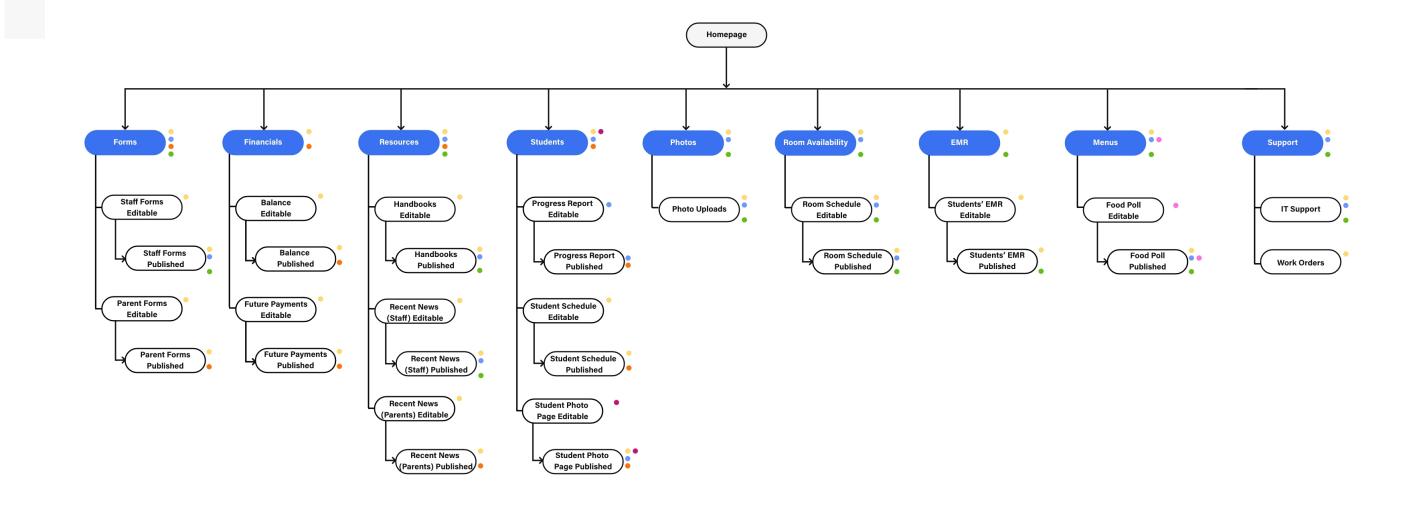
Usability studies

### Sitemap

The following two aspects made the TKS Communication Portal complicated:

- Need to easily add more pages based on the growth and responsibilities within the school.
- Ability to give viewing permissions. For example, a teacher doesn't need access to a parent's financial account, and the parent doesn't need to view some of the teachers' pages.

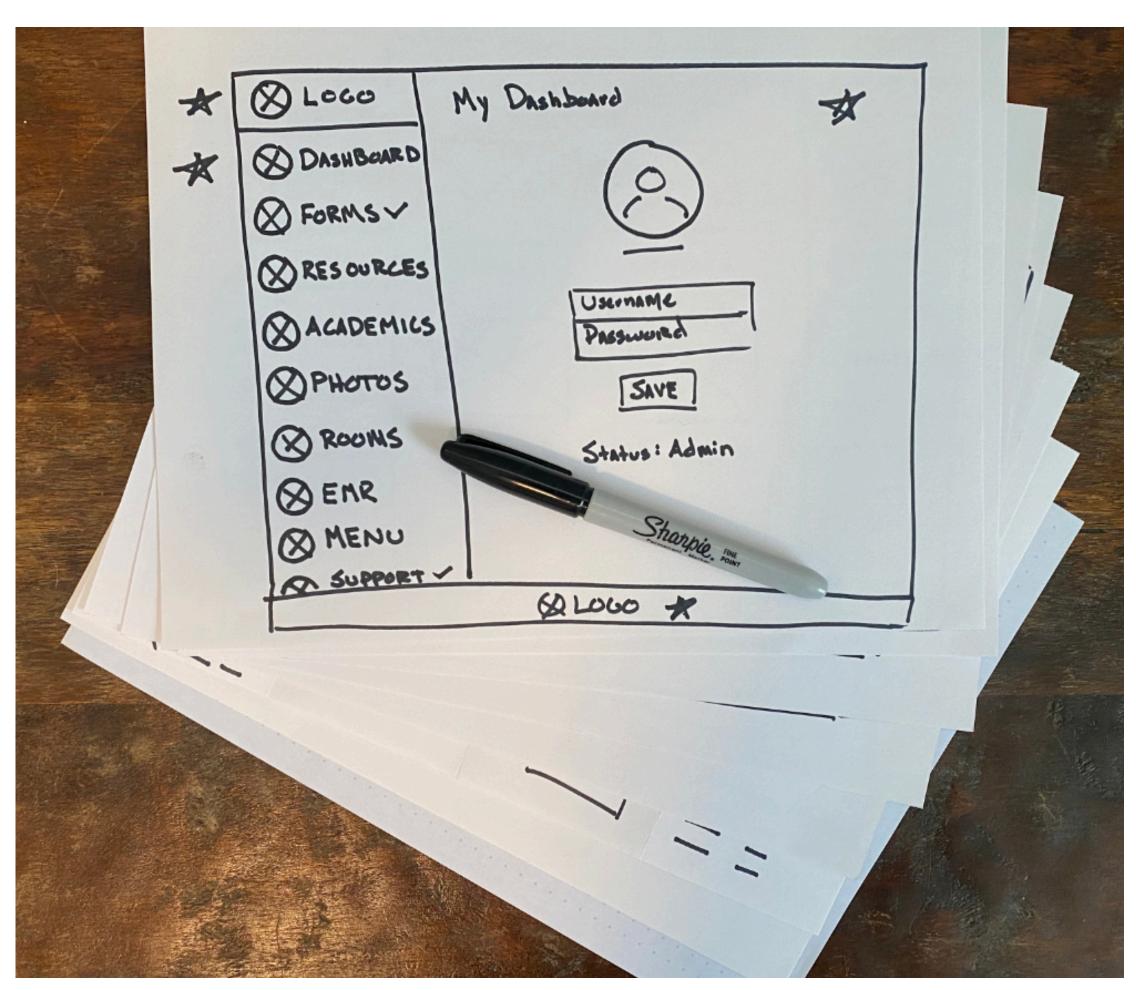
A sitemap was imperative for this project to understand the daily flow of communication.



Parents: Login credentials display data only specific to the parent

### Paper Wireframes

Taking the time to draft iterations of each screen of the communication portal on paper made it easy to draft the wireframes before going digital. The priority was to make communication ease and located in one place. Desktop and mobile versions of the online communication portal were designed.

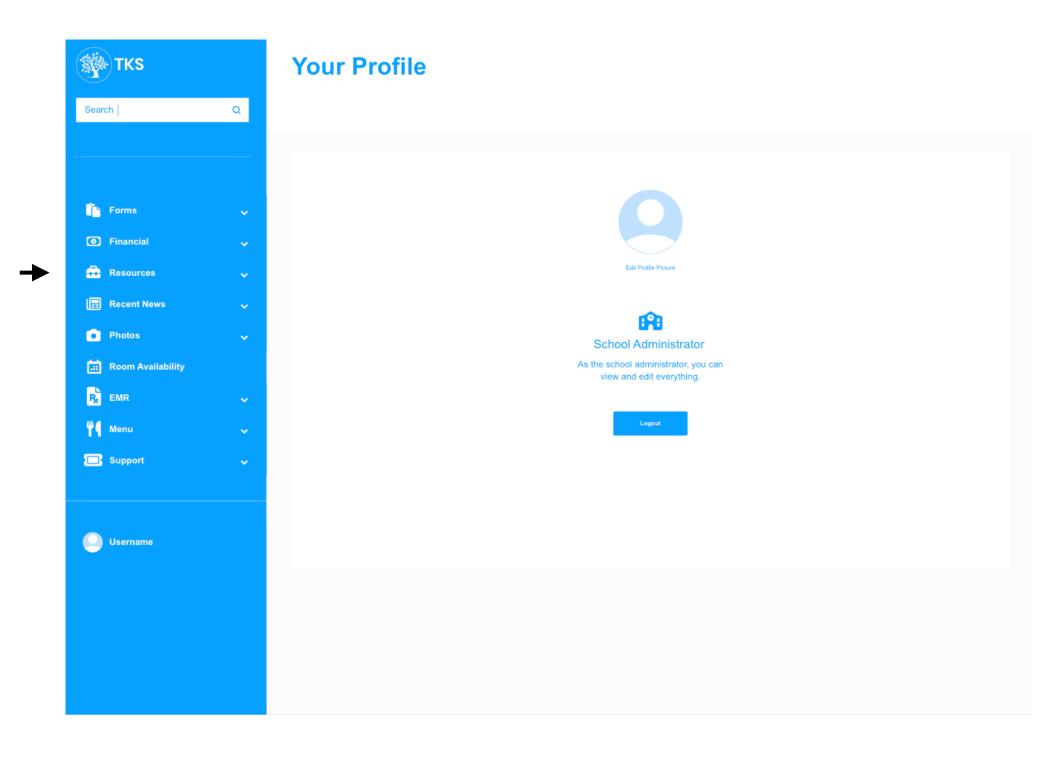


### Digital Wireframes

### TRANSITIONING FROM PAPER

One of the challenging aspects of designing the online platform was creating a design that could grow. I chose to use a vertical menu to display numerous pages but change based on the user logged into the portal. For instance, an administrator may need to see most of the pages, but a parent's view would be limited.

Vertical menu to accommodate multiple pages but maintaining a clean look.



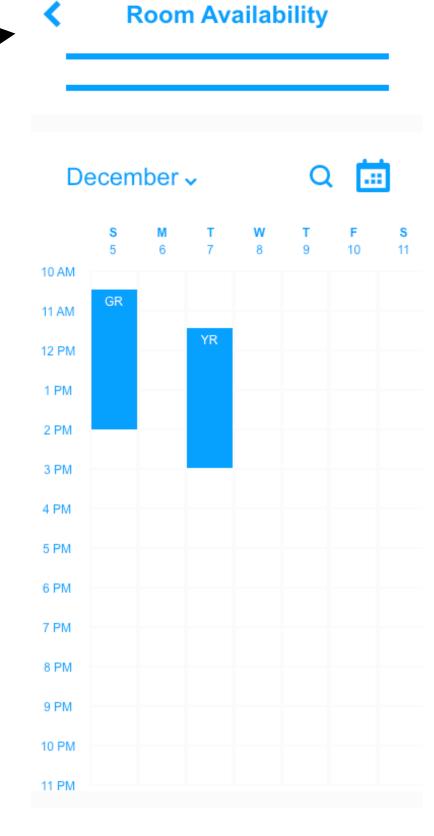
### Digital Wireframes

#### TRANSITIONING FROM PAPER

The TKS Communication Portal needed to be useable on the computer and phone while maintaining most functionality. The mobile view included using a retractable menu. The initial design included a back arrow to access the menu but was later replaced by hamburger menu icon to eliminate confusion.

Accessing the menu.

Later replaced with a
hamburger icon based
on usability studies.



## Low-Fidelity Prototype



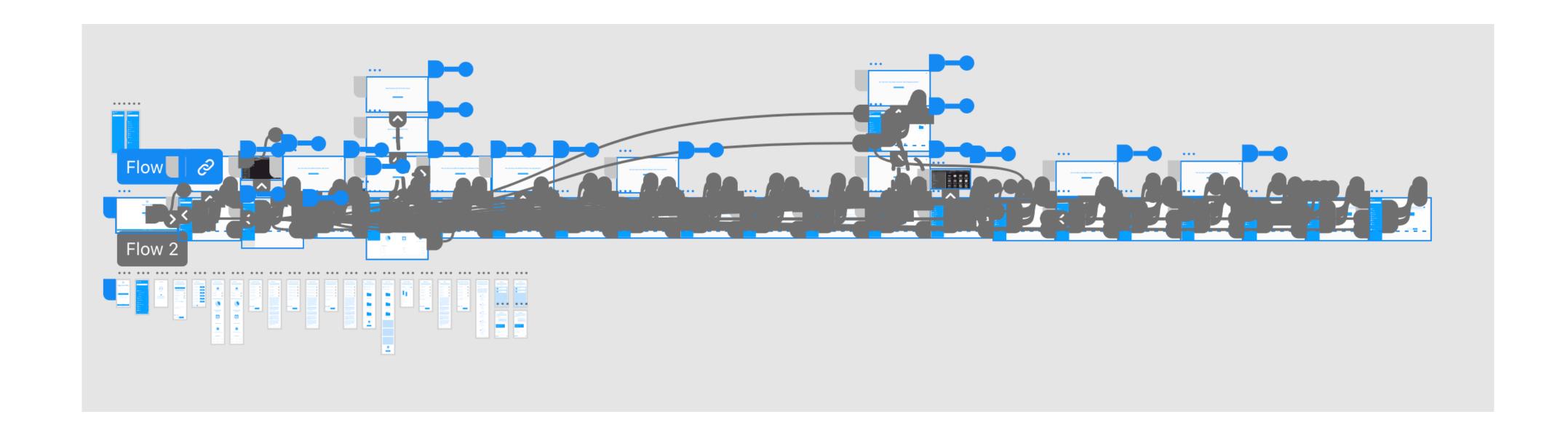
#### MAKING IT EASY FOR THE USER

Using the completed set of digital wireframes, I created a low-fidelity prototype. The primary goal of the user flow was to make it easy simple to ease multiple forms of communication.



VIEW THE LOW-FIDELITY PROTOTYPE

Low-fidelity prototype



# Usability Study

TYPE

Unmoderated usability study

LENGTH

20-30 min

LOCATION

Remotely

PARTICIPANTS

5 participants (4 staff members, 1 parent)

# Usability Study

#### **ROUND 1 FINDINGS**

- Users were unsure if the "x" icon meant to close a document or delete.
- Users were confused by the back button to access the mobile menu. The simple change of replacing the back button with a hamburger menu eliminated the confusion.
- Users wanted to link back to therefore profile after clicking the logo at the top of the menu.

### **ROUND 2 FINDINGS**

- The TKS Administrative staff wanted a solution to remind accessory staff to completed required forms in a timely way.
- The TKS Administrative staff were interested in the ability to add bank information to automate the payment process from the parents.

Mockups

High-fidelity prototype

Accessibility

### Mockups

The back arrow was replaced with the hamburger icon to remove any confusion on how to access the mobile menu.

#### **BEFORE USABILITY STUDY**

#### AFTER USABILITY STUDY

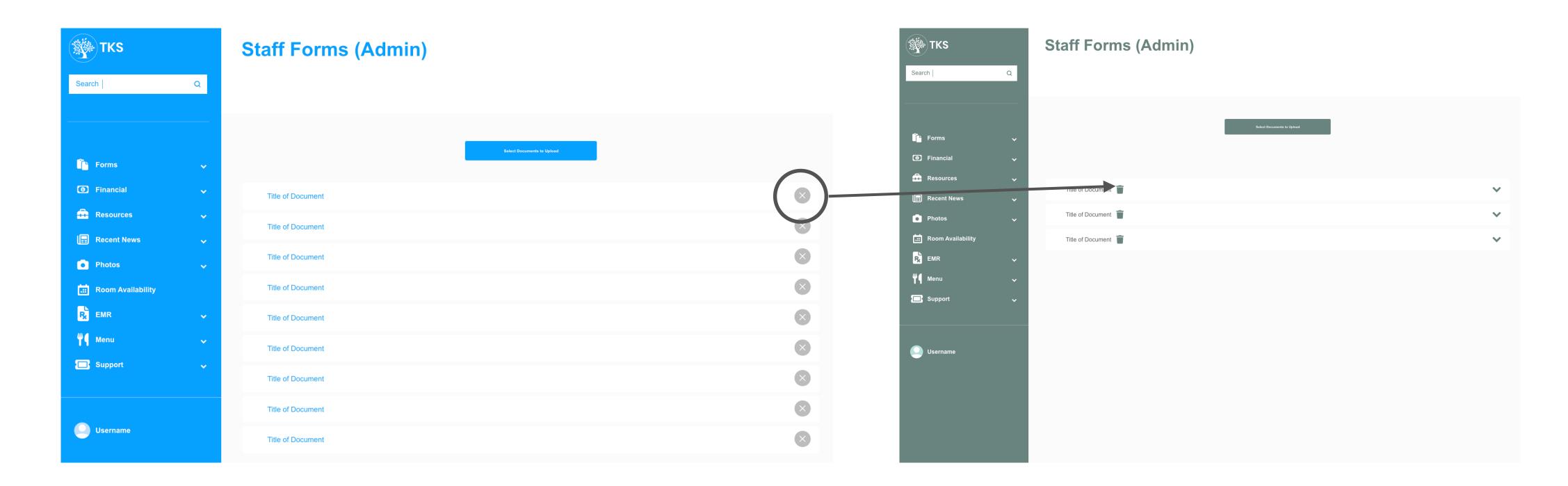
Title of Handbook  Title of Handbook
tle of Handbook
Title of Handbook
Title of Handbook
1 <del>S</del>   Ø   ½∃ ;∃   ⊟
art a new message

## Mockups

The "x" close button was replaced with a garbage can icon to eliminate any confusion on how to delete a document or section.

#### **BEFORE USABILITY STUDY**

#### AFTER USABILITY STUDY



## Mockups

A slider and reminder functionality was added to automatically remind staff members to upload a form. The reminders would stop once the form was uploaded.

#### **BEFORE USABILITY STUDY**

#### AFTER USABILITY STUDY

Title of Document		
Status: Draft		
% Uploaded 75%		
To:		
$B  I  \stackrel{\bullet}{S}  \boxed{0}  \boxed{\frac{1}{2} \equiv \frac{1}{2}}  \stackrel{\square}{\equiv}          $		
Start a new message		
<b>→ → =</b>		
	Save Draft	Publish

Title of Document	
Reminders Status: Draft	
% Uploaded 75%	
To:	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
Start a new message	

Save Draft

Publish

## Low-Fidelity Prototype



#### MAKING IT EASY FOR THE USER

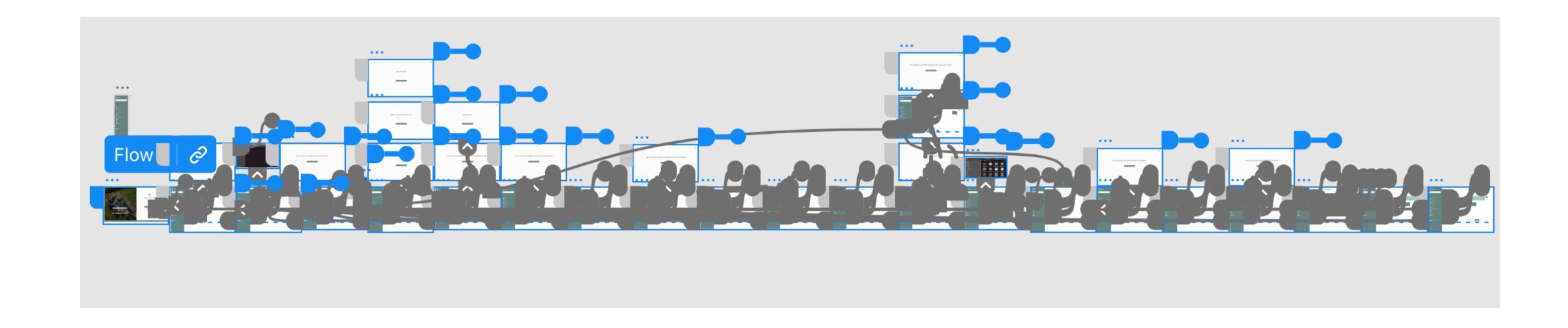
The final prototype included the modifications to ease the user flow while maintaining a minimal viable product. The key was to keep the design simple but modular so that the software would grow to meet the demands of The Kilmore School.



#### VIEW THE HIGH-FIDELITY PROTOTYPE

High-fidelity prototype (Desktop)

High-fidelity prototype (Mobile)

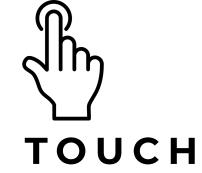


## Accessibility



**VISION** 

The design included high contrast to assist individuals with low contrast sensitivity. The designs also avoided color combinations that could be hard to distinguish.



Icons with text and a significant amount of padding were included to make it easy to use the icon's functionality. In addition, different finger sizes and those with impaired fine motor skills were considered during the design.

# TAKEAWAYS





TKS's goal is to provide children with special needs diagnoses the ability to learn academics and become proficient in social interaction and behavioral management. A communication platform was needed to streamline campus-wide interaction for the staff to stay connected and have the mental energy to help the kids. It has been a pleasure designing a desktop and mobile modular design that will grow with TKS. Future designs and research could include a backend administrative portal and interactive checklists for staff.

