

# TCSS 360

## Group Emerald



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## Table of Contents

Summary Page.....	(3)
Requirements Definition / Functional Requirements.....	(4)
Story board / Paper Prototypes.....	(5)
Requirements Specification / Technical Specification.....	(15)

## Summary

Team Emerald is made up of four members: Alex Ewing, Owen Orlic, Lucas Perry, and Daniel Alberto Sanchez Aguilar. Our vision for this product is envisioned through an application called the Project Partner ®. The issue that many DIY enthusiasts encounter is the difficult nature of keeping the project properly organized and well documented. With so much information and the stress of managing it all, following through with a DIY project idea can become quite daunting. The Project Partner handles the essential needs for any DIY enthusiast. The Project Partner provides the user with the means to track the project's overall budget, as well as the budget for smaller subsections of the project. It also provides an easily accessible way to store all related files to the project. The Project Partner includes a journal feature that allows the user to mark down any notes or design decisions in a single location. Additionally, the Project Partner can track multiple projects, with the ability to make any project private. This application is designed to be the support that any DIY enthusiast can lean back on and trust to help complete the job when it is too much for one person.

Dave: He is an auto mechanic and likes to do DIY projects in his free time. Being an enthusiast, he's tight on money and does not have the luxury to spend at his free will. Having a way to keep track of spending would keep Dave financially stable and be able to view how much he's spending so far and see if he can cut down on expenses.

Sally: She is an accountant who is great with finances, but is useless when it comes to organizing information. She likes to plan elaborate parties but needs help keeping track of material costs and party design elements.

Dave's Scenario: I want to plan out and track my budget on this upcoming DIY project I have been thinking about. I have a fixed budget that I have entered into the application. When I enter in purchases (or planned purchases) the budget tracker reflects the amount of money I have left. This helps keep my spending habits in check since I can plan out all of my purchases. Additionally I can journal the materials that I have required and write out my plans/designs accessed from a different menu.

Sally's Scenario: I am planning a large party, this application comes in handy for tracking expenses, journaling designs, and keeping certain projects private. The privacy feature is especially important because I want this party to be a surprise. If I choose the project to be a private one, I can assign a simple pin that keeps the project locked. Since I can lock the project, I can now write down notes on the party design and ideas in the applications journal feature without worry.

# Requirements Definition / Functional Requirements

//US12: As a DIY enthusiast, I'd like a way to journal my plans, activities, and purchases so I can keep track of how my estimates compare to my actual costs and guide later financial decisions.

//US02: "As a DIY enthusiast I want to be able to change my budget as my project plans change".

US01: As a family party planner I want to be able to keep specific projects private so I can plan surprise parties.

US03: As a father, at times my kids use my computer so it would be concerning that they are able to modify my projects or more importantly delete them. I would want a way to easily secure the work I've done if my kids manage to get to the application.

US08: As a retired accountant, I liked to be organized in tasks especially if it requires my money. Having an organized environment where I can keep track of expenses and budget and journal what's next or jot dot notes on a task would be helpful.

US11: As a DIY enthusiast, I'd like a way to organize my project information, plans, costs, and budget.

US13: As a DIY enthusiast, I need an application that can be used for many different types of projects. For example, large or small, indoor or outdoor.

US14: As an engineer, I want to be able to collect all my sketches, receipts, warranty information, and instructions in one place.

US15: As a DIY enthusiast, I'd like to be able to import files from the internet to avoid relying on links to webpages.

US10: As Dave's handyman, I'd like to be able for Dave to send me info on his project like materials where I happen to know a guy where I can get a good deal for such material.

US17: As someone who renovates a lot, I want to be able to keep plans or appliance information dated so I can tell what's being currently used and what might be old.

US18: As someone with a lot of projects, I want the projects I have to be easily accessible/manageable, and not locked behind a bunch of passwords.

US19: As someone with an unreliable connection, I'd like to be able to view the application and search through my projects without an internet connection.

US04: As an engineering professor, I want to have a way to export projects I create to my students.

US05: As a clumsy person, I would like a warning before deleting plans so that I do not accidentally delete important files.

US06: As a floor installer, I'd like to store and have access to PDFs and images of my different job sites.

US07: As a home renovator, I'd like to have a place to store user manuals and product information for all the appliances I frequently buy.

US09: As a DIY enthusiast, I'd like to be able to use tag words on my projects so I don't need to remember the exact name of my files

US16: As a DIY enthusiast, I'd like to be able to scan physical documents to avoid keeping physical copies of some information and digital copies of others.

BR01: The application must not have an in-depth password system, the pin should unlock something like a maintenance mode in the project selected.

BR02: The application must still be accessible without an internet connection.

BR03: The application should be able to store multiple projects

BR04: The application should be able to import and export documents of a project

BR05: The application should be make it simple to modify and edit elements within a project

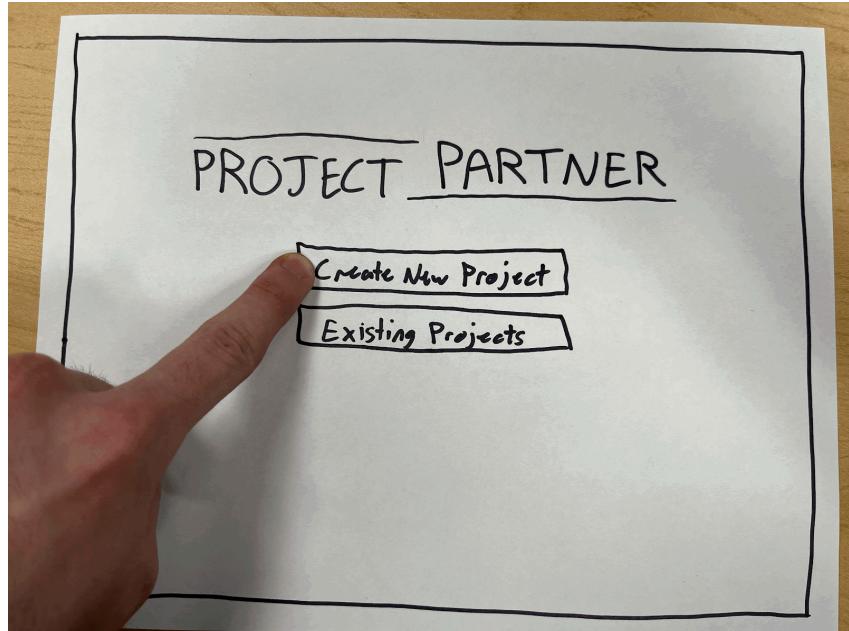
NFE01: The application should pull up projects and their elements quickly

NFE02: The application should be simple to use and navigate

NFE03: The application can be used on a desktop (Java application)

## Story board / Paper Prototypes

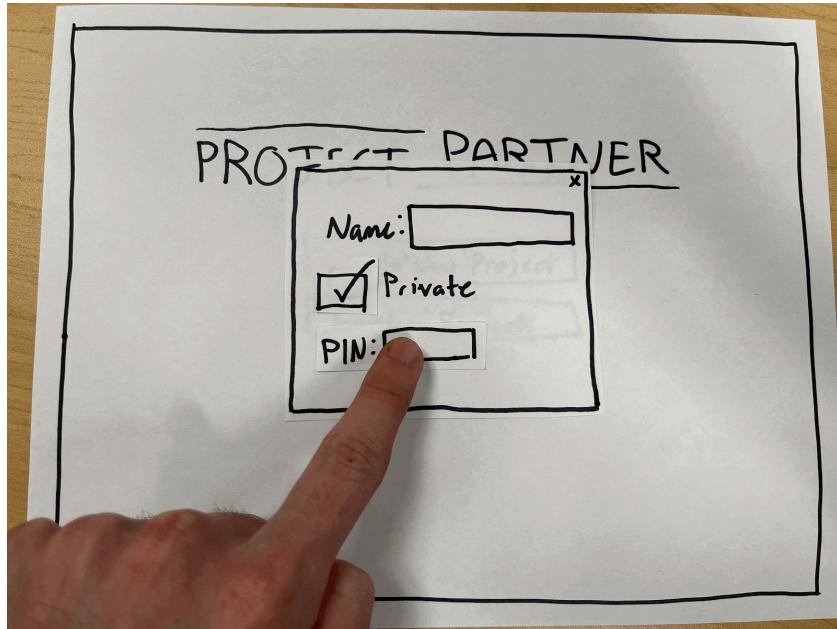
User Story 01: As a family party planner I want to be able to keep specific project private so I can plan surprises.



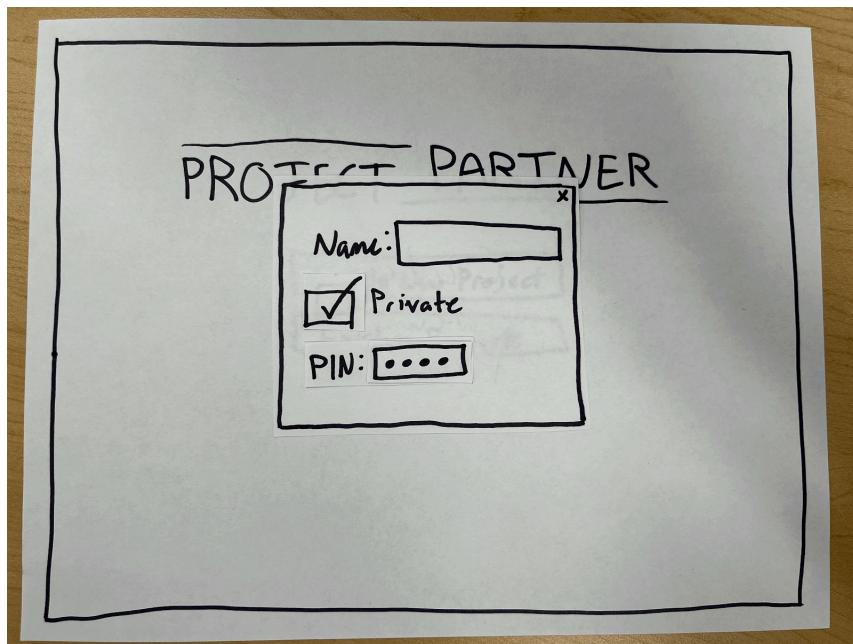
Start by selecting Create New Project



Then enter a name for your project and select the Private option

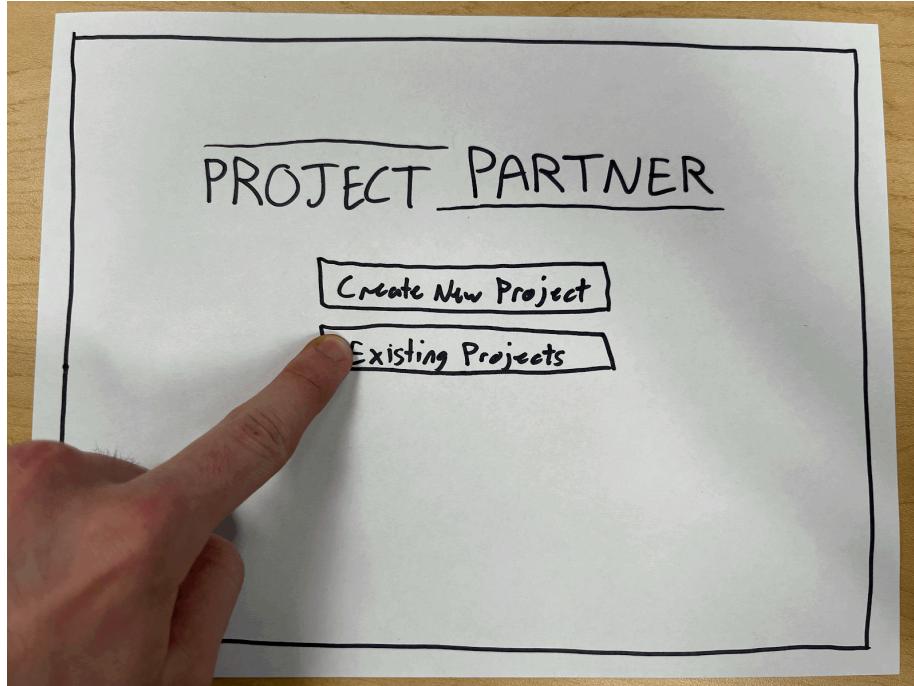


Once you select the Private option you will be allowed to enter a 4 digit pin

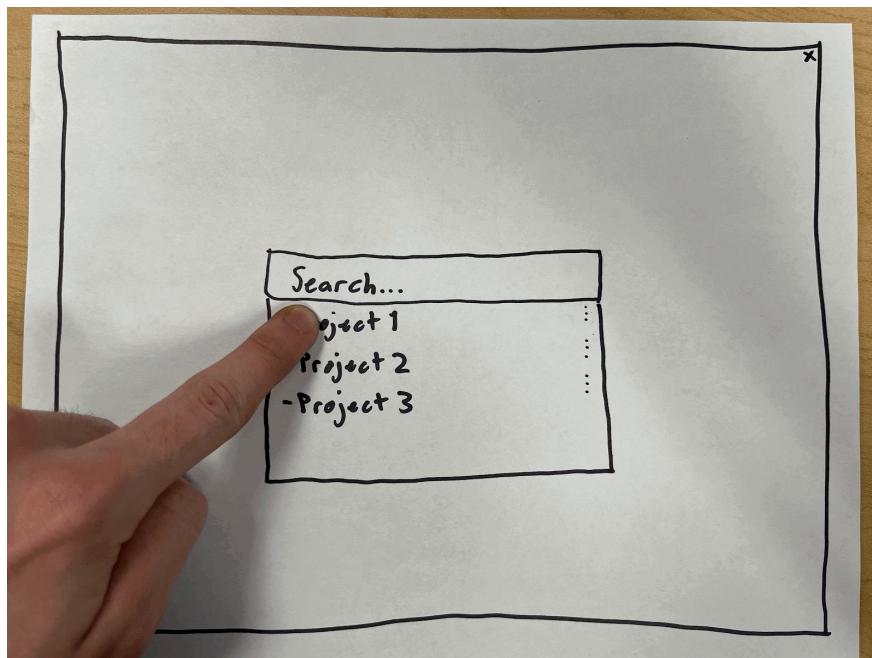


Now you have created a new private project!

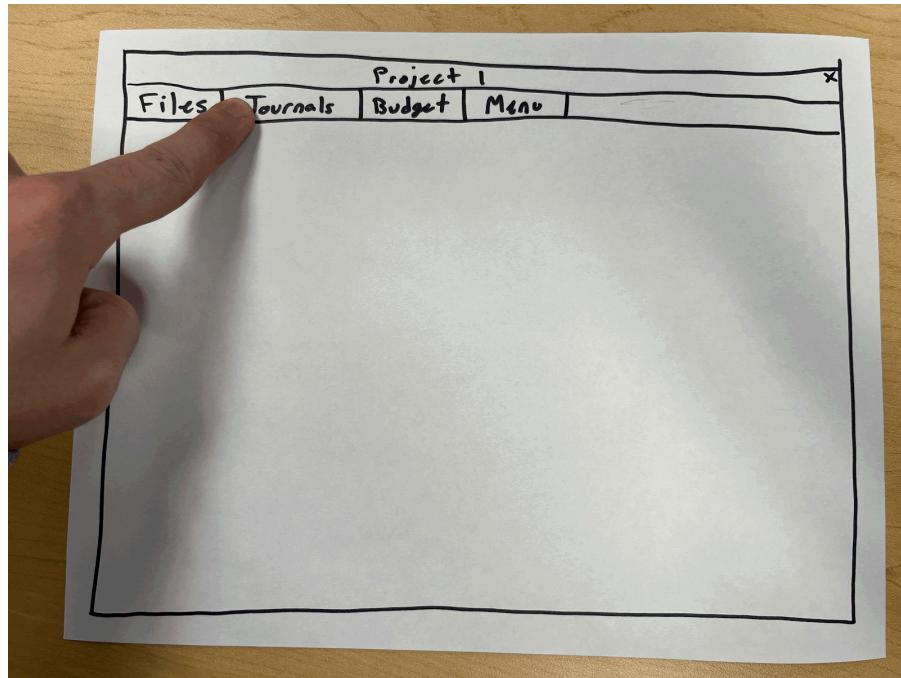
User Story 02: As a DIY enthusiast I want to be able to change my budget as my project plans change.



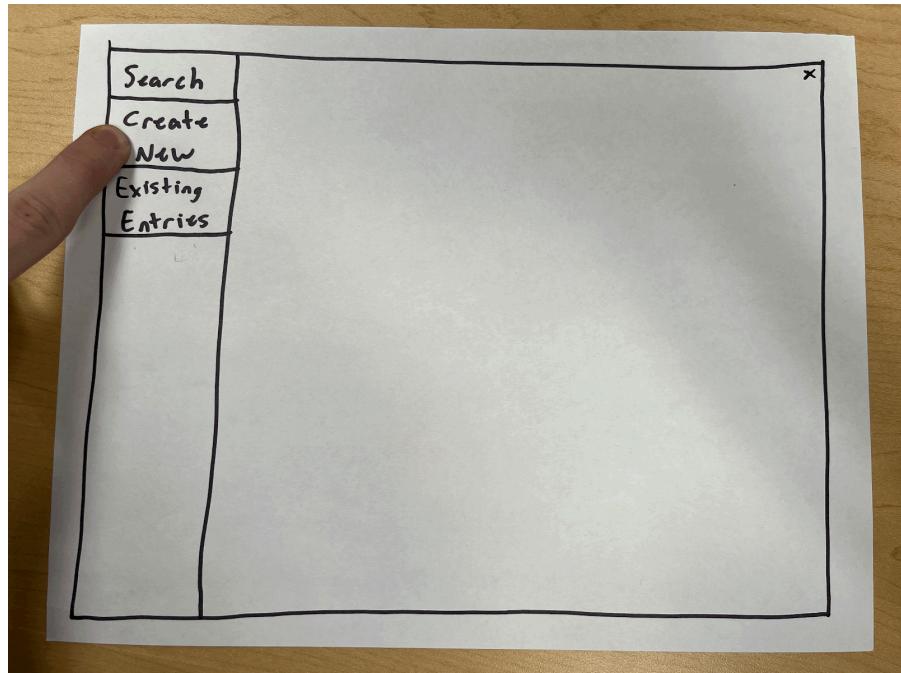
Start by entering an existing project



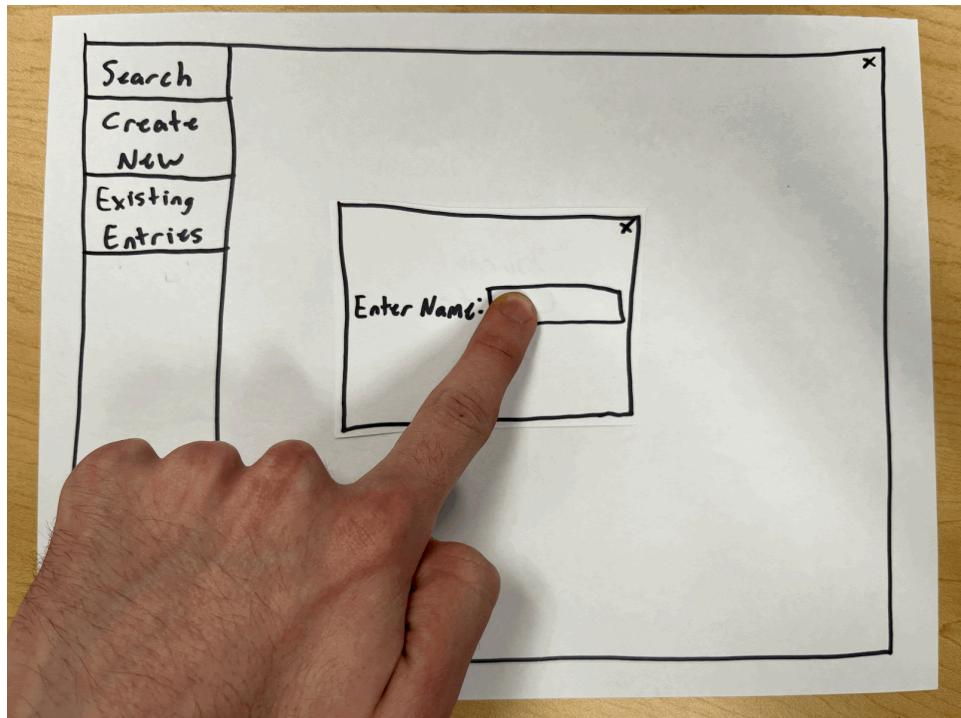
Then select the project you wish to add a journal to



Then select the Journals button at the top of the screen

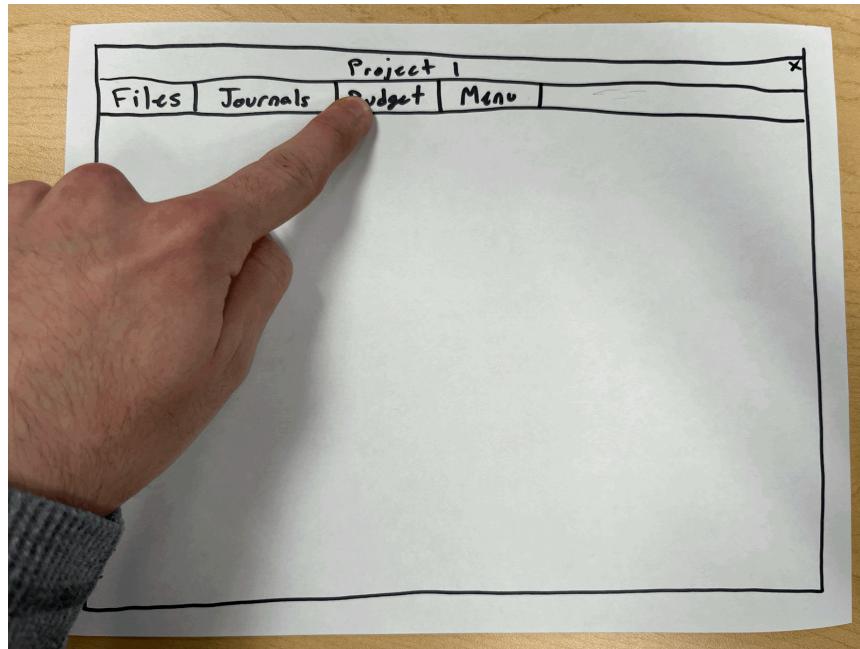


Once you have been brought to the journal page, select Create New

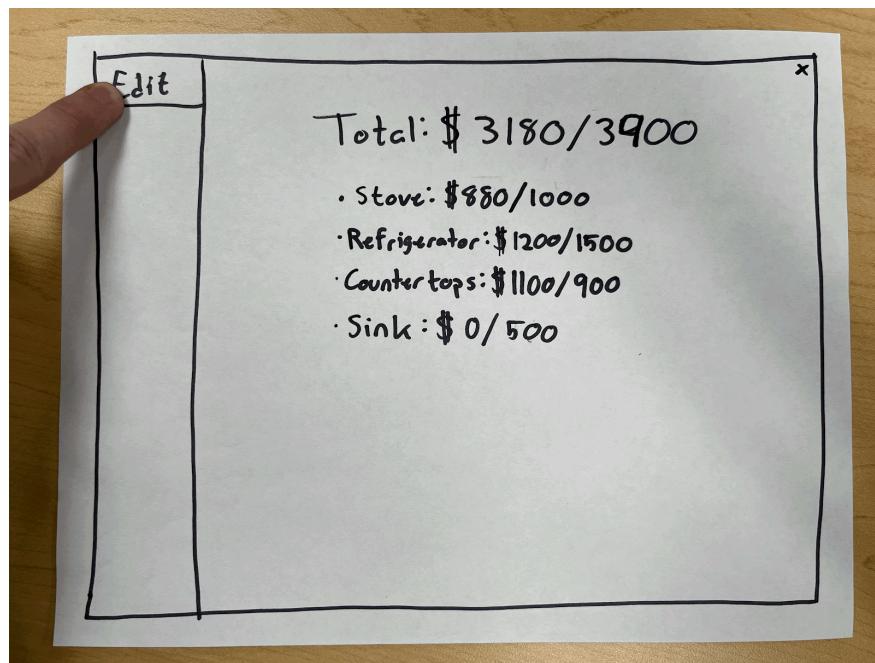


Enter a name for the journal and you will have a new journal created!

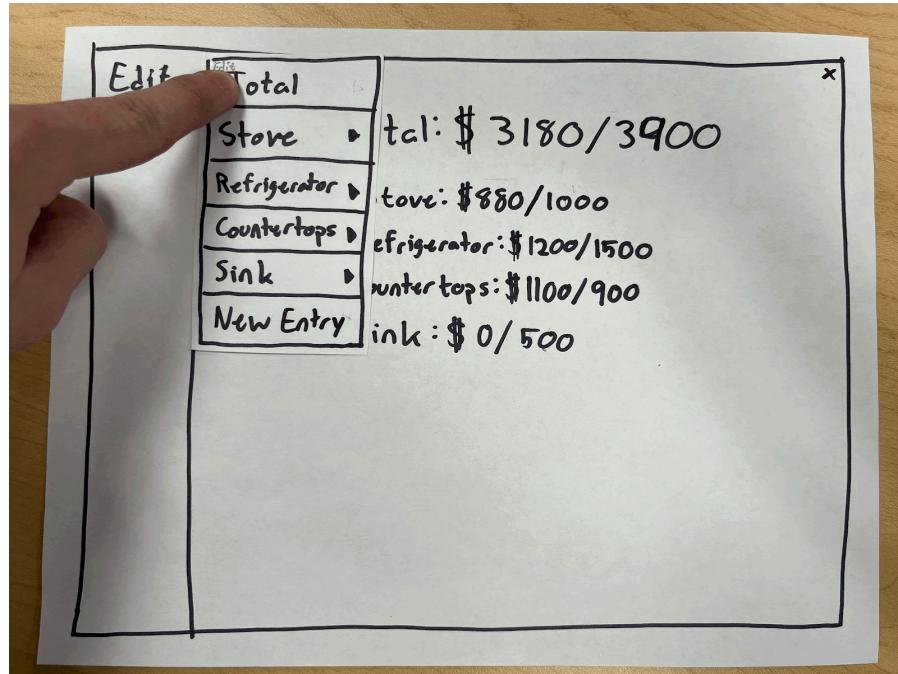
User Story 12: As a DIY enthusiast, I'd like a way to journal my plans, activities, and purchases so I can keep track of how my estimates compare to my actual costs and guide later financial decisions.



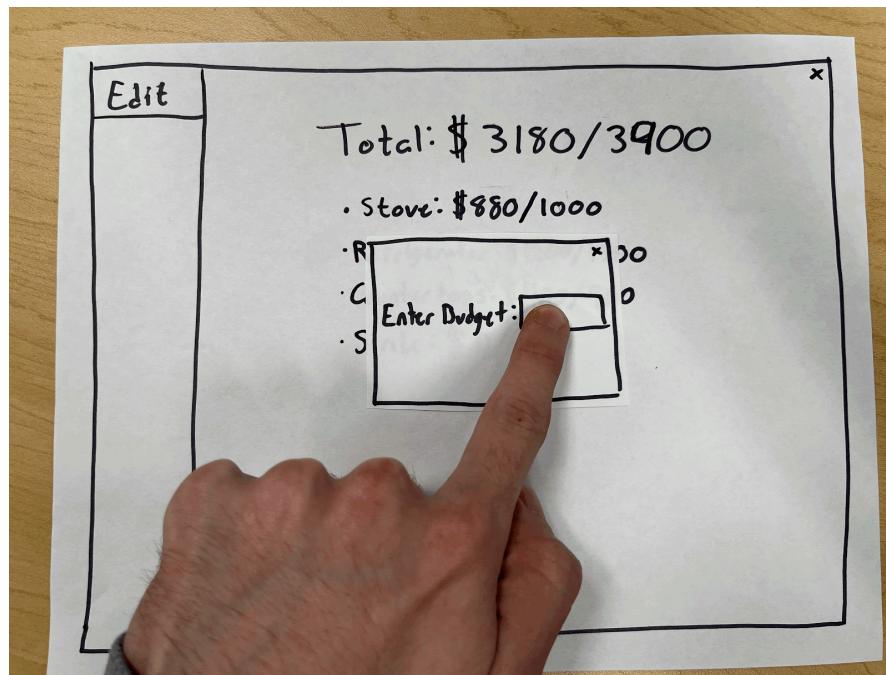
From the main project page, select the Budget button at the top of the screen



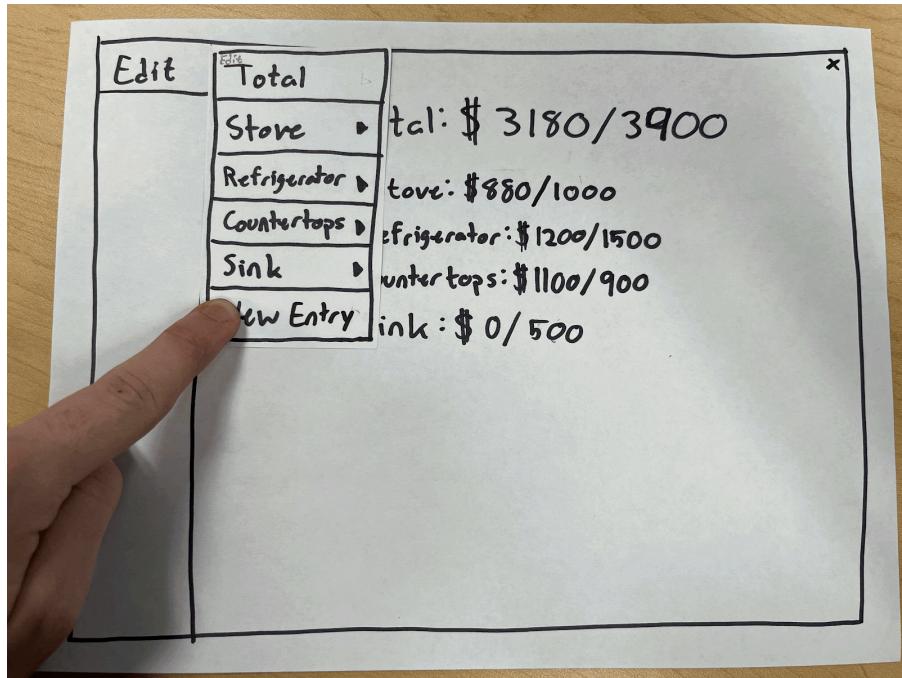
Select the Edit option



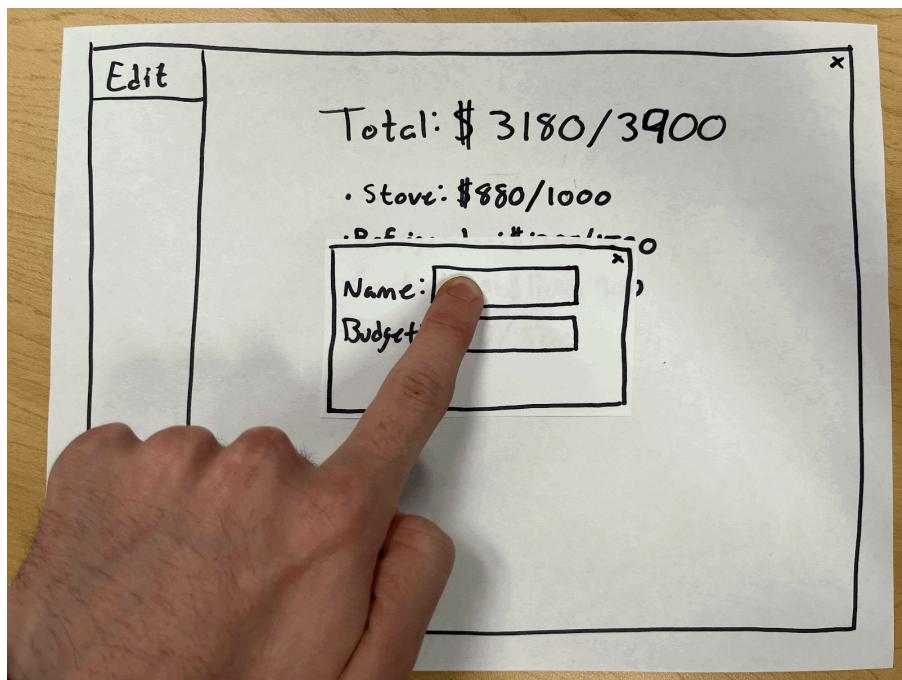
To change the total budget, select Edit Total



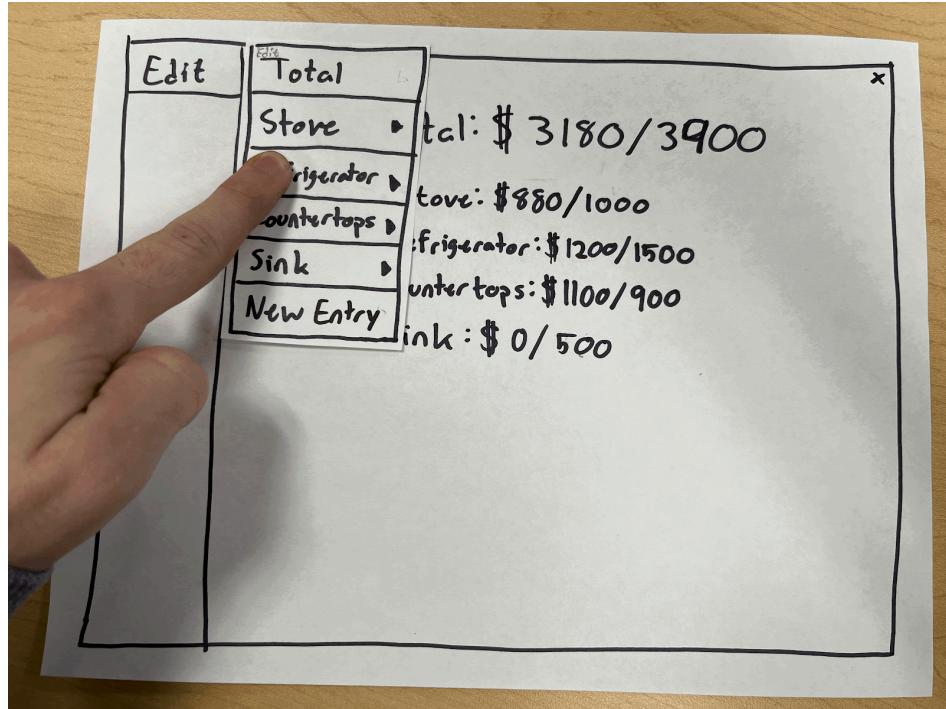
Enter the new total budget for the project



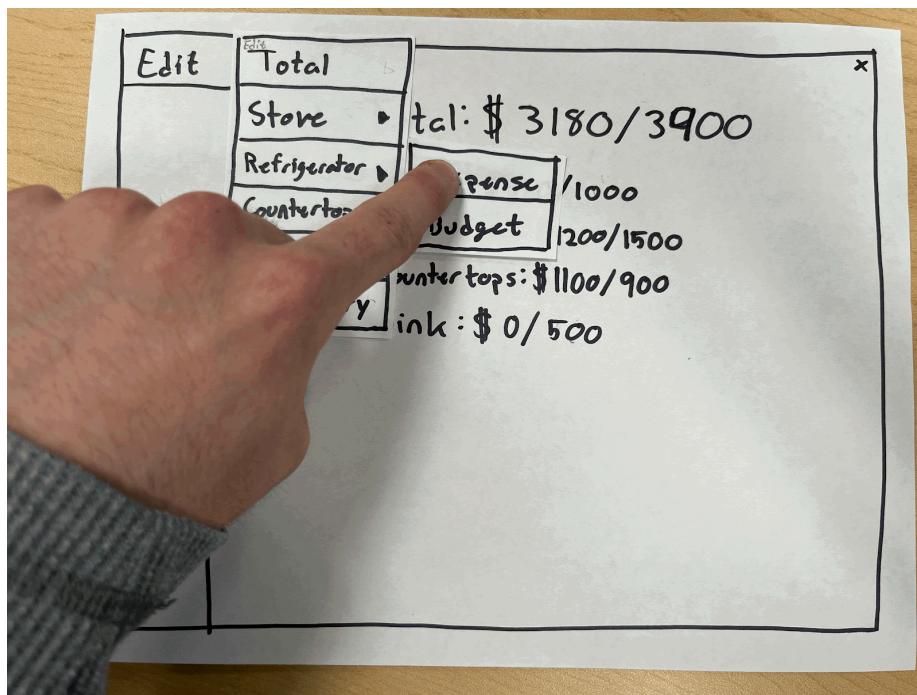
To add a new item to the budget list, select New Entry



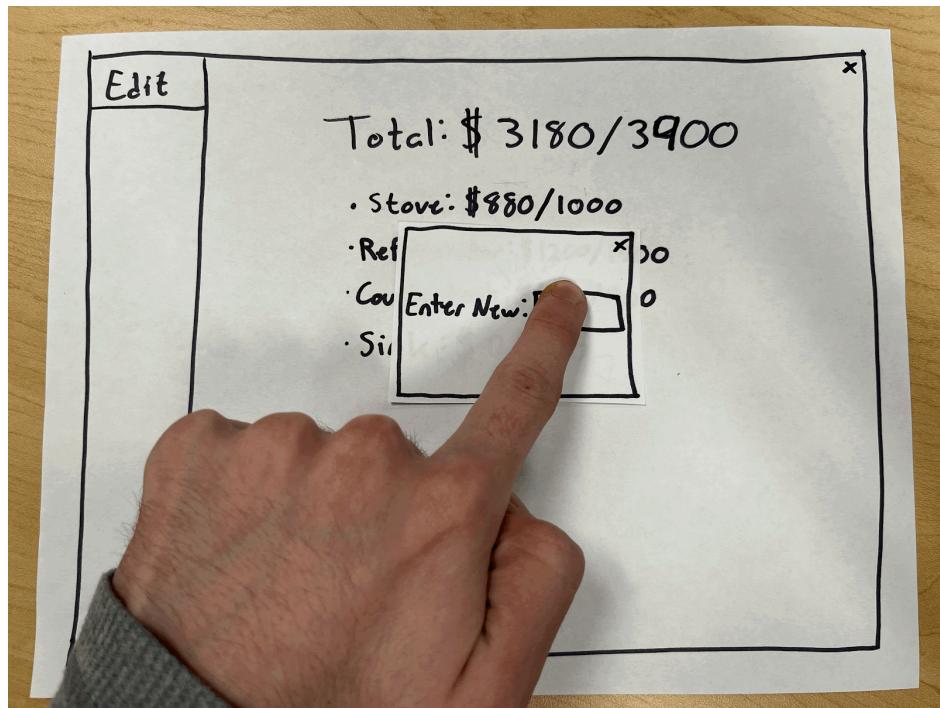
Then enter a name and budget you'd like to set for the item



If you would like to edit an item currently in the budget, select that item



Then select whether you'd like to change the expense or budget of that item



Enter the new expense or budget and your budget list will be updated!

# Requirements Specification / Technical Specification

## **Security:**

Implement PIN-based access for maintenance mode (BR01).

Ensure projects are private unless shared explicitly (US01, US03, US18).

## **Offline Accessibility:**

Develop the application for desktop use (NFE03).

Enable offline access for all features (BR02, US19).

## **Project Management:**

Allow creation, modification, and deletion of projects (BR03, BR05).

Implement tagging system for project organization (US09).

## **Budgeting and Finance:**

Provide budgeting features with flexibility for adjustments (US02, US08, US11, US12).

Track expenses, purchases, and estimated vs. actual costs (US12, US11).

## **Document Management:**

Support importing and exporting various file formats (BR04, US06, US14, US15, US16).

Enable scanning of physical documents for digital storage (US16).

## **Collaboration:**

Facilitate sharing of project information with collaborators (US10, US04).

## **Data Integrity and Recovery:**

Implement warning prompts for critical actions like plan deletion (US05).

Regularly backup project data to prevent loss (N/A).

## **Performance:**

Optimize application performance for quick project retrieval and element editing (NFE01).

Ensure intuitive user interface design for ease of navigation (NFE02).