Requirements Document for Team Minimum Viable Product Relating to the Development

of MVP Project Planner for Mat Decker

Minimum Viable Product

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https://github.com/TCSS360Group2Fall2023/Golden-Group-2-Repository

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TCSS360: Software Development And Quality Assurance Techniques

Professor Jeffrey Weiss

October 29, 2023

Contents

Introduction

Purpose

The purpose of this document is to outline requirements and features intended for implementation in a software being developed after a meeting with Mat Decker. Mr. Decker consulted Jeffrey Weiss, and identified that he would like a software application to help in completing and tracking his recent DIY projects.

Scope

This document is intended to cover the requirements and features of a software product initially named *MVP Project Planner (MPP)*. This document should describe the first build of *MPP*, but it is of importance to note that some features and minor details are subject to change by the final product. This document is meant to be interpreted only as a guideline for how *MPP* is planned to be implemented, and is intended to be read and reviewed by Mat Decker to ensure the development of this software is to his satisfaction. *MPP* is intended to be a software useful in planning and organizing DIY projects, as identified in the initial client interview.

MPP is meant to keep track of tools, budgets, and individual projects. *MPP* will provide functionality to keep track of an inventory of tools that can be added to a project, as well as expenses associated with a project. There will be a simple *User Interface (UI)* to store all the materials needed for a project and the overall cost of buying those materials. Projects can be exported to other users which will include the tools used, expenses, schedules, logs, and any other relevant information or files stored within a project.

Definitions, Acronyms, and Abbreviations

MVP	*Minimum Viable Product*, the team responsible for this document.
MPP	*MVP Project Planner*, the software discussed in this document.
DIY	*Do It Yourself*
UI	*User Interface*

Overview

The rest of this document serves to provide a basic understanding of the development goals and intended features of the first full release of *MPP*. There will be outlining of relevant user stories and rules, storyboarded walkthroughs of how a user would achieve certain tasks described in user stories, high level basic structures for important objects within *MPP*, and a list of formal features and functions intended to be included in the first version of *MPP*.

Scenarios and Personas

SP01 - As a DIY enthusiast I have smaller scale projects where budget is very important to me. I want to be able to keep track of my tools and purchases throughout my projects and be able to log my progress easily.

SP02 - As a Project Manager, I want to work on a great number of projects and have easy access to my materials as need be. I'd like an app that can store and export my projects that can be accessed from anywhere.

SP03 - As a stay-at-home mom I see the potential to use this app to keep track of small projects, as well as supplies. I want to be able to store and keep track of information for the things I do at home.

Functional Requirements

User Stories

US01 - As a DIY enthusiast, I'd like to start a project that contains my budget, things to buy, and a way to log my progress.

US02 - As a project manager with a lot of projects, I'd like the ability to use keywords in a search instead of having to memorize entire folder names.

US03 - As a DIY enthusiast, I'd like to be able to store my purchased tools outside my projects, and reference them inside my projects as needed without having to add them to my budget.

US04 - As a DIY enthusiast, I'd like a tool that makes the learning experience of planning and budgeting easier and more accessible.

US05 - As a DIY enthusiast, I want to be able to reference a previous project in a new project so I can use floor plans and material estimates in my new projects.

US06 - As a project manager who wants easy access to backend features, I'd like to be able to access maintenance mode without a password.

US07 - As a DIY enthusiast, I'd like a way to keep all warranties and receipts for my tools in one place so I can easily access them later.

US08 - As a stay-at-home mom, I'd like a way to keep track of what I'm buying to build a new garden.

US09 - As a DIY enthusiast, I'd like a way to keep records of the budget so that everyone can stay on the same page.

US10 - As a project manager I'd like to keep track of our budget and deadlines.

US11 - As a project manager, I'd like to be able to easily keep track of floor plans and renovations to property.

US12 - As a project manager I'd like to journal progress as we build a new apartment complex.

US13 - As a project manager I need to be able to export data to share with my other departments.

US14 - As a stay-at-home mom, I want to create project ideas and share them with others.

US15 - As a stay-at-home mom, I want to keep track of our home purchases.

US16 - As a stay-at-home mom I'd like to have the option for the UI to be darker for my poor eyes.

US17 - As a project manager who doesn't always have access to a desktop, I'd like to be able to use the app on my phone.

US18 - As a stay-at-home mom who can be a bit clumsy when it comes to my data, I'd like protection from unauthorized deletion.

Business Rules

BR01 - No passwords required when accessing the "maintenance mode". (US06)

BR02 - Ability to access the tool on non-desktop appliances such as a phone. (US17)

Non-Functional Requirements

NF01 - Protect from unauthorized deletion (US18)

NF02 - Data should be exportable. (US13)

Storyboard

Example 1

US01 - As a DIY enthusiast, I'd like to start a project that contains my budget, things to buy, and a way to log my progress.
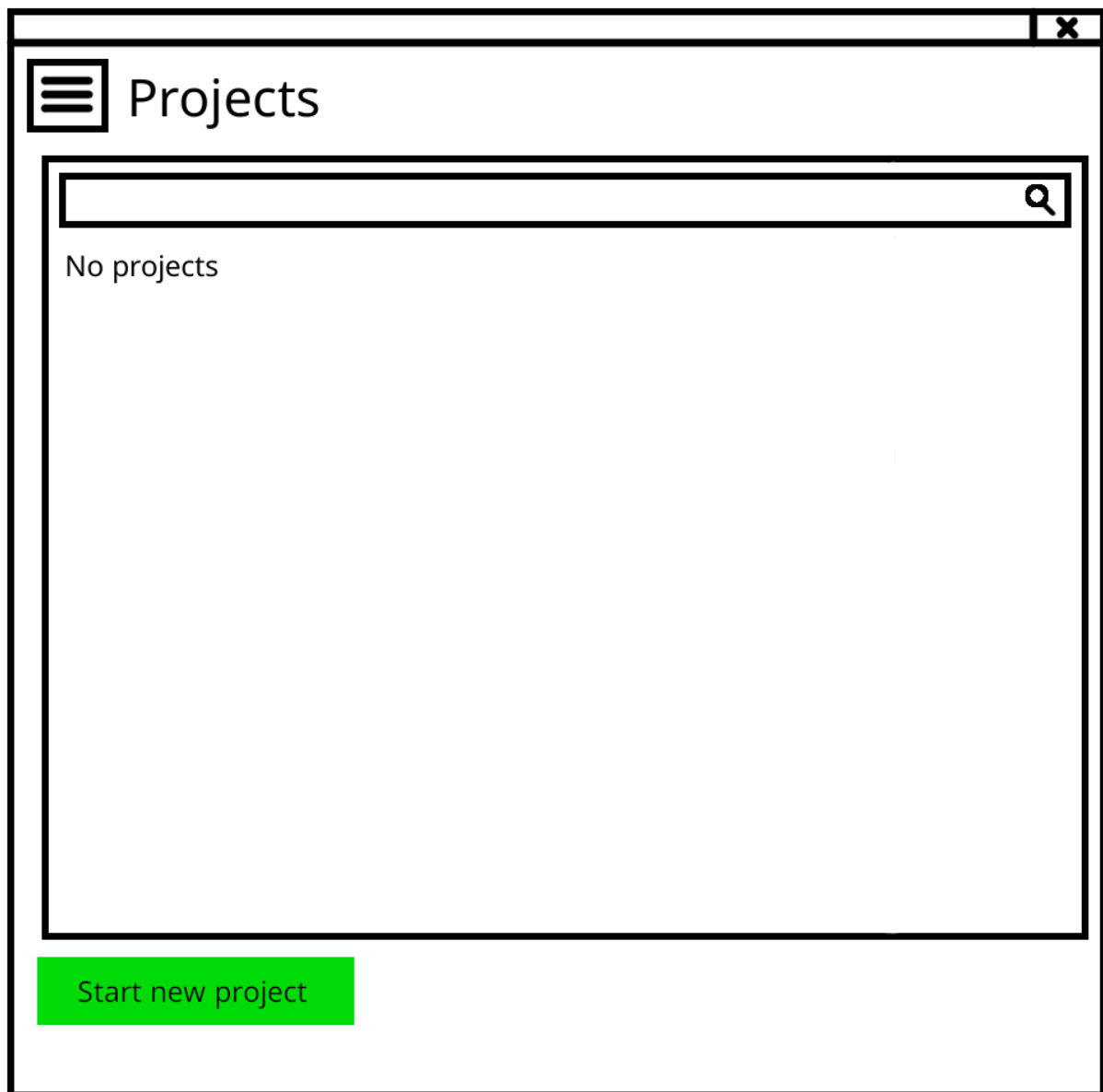
New Project

Project Name*

MyProject

Budget*

$ 5,000

Description

This is an example project

＋ New image

*Required fields

Save   Cancel

✕

Overview $0 / 5,000   No schedule set

Expenses

Add expense

Logs

Add log

Tools

Add tool

✕

Overview $416.60 / 5,000 No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Add log

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Add log

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Date	Name	
10/29/2023	Day 1	◀

Add log

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Date	Name	
10/29/2023	Day 1	◀

Add log

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Date	Name	
10/29/2023	Day 1	▼

Description

Bought oak planks for hardwood flooring.

Images

+ New image

Add log

Example 2

US02 - As a project manager with a lot of projects, I'd like the ability to use keywords in a search instead of having to memorize entire folder names.
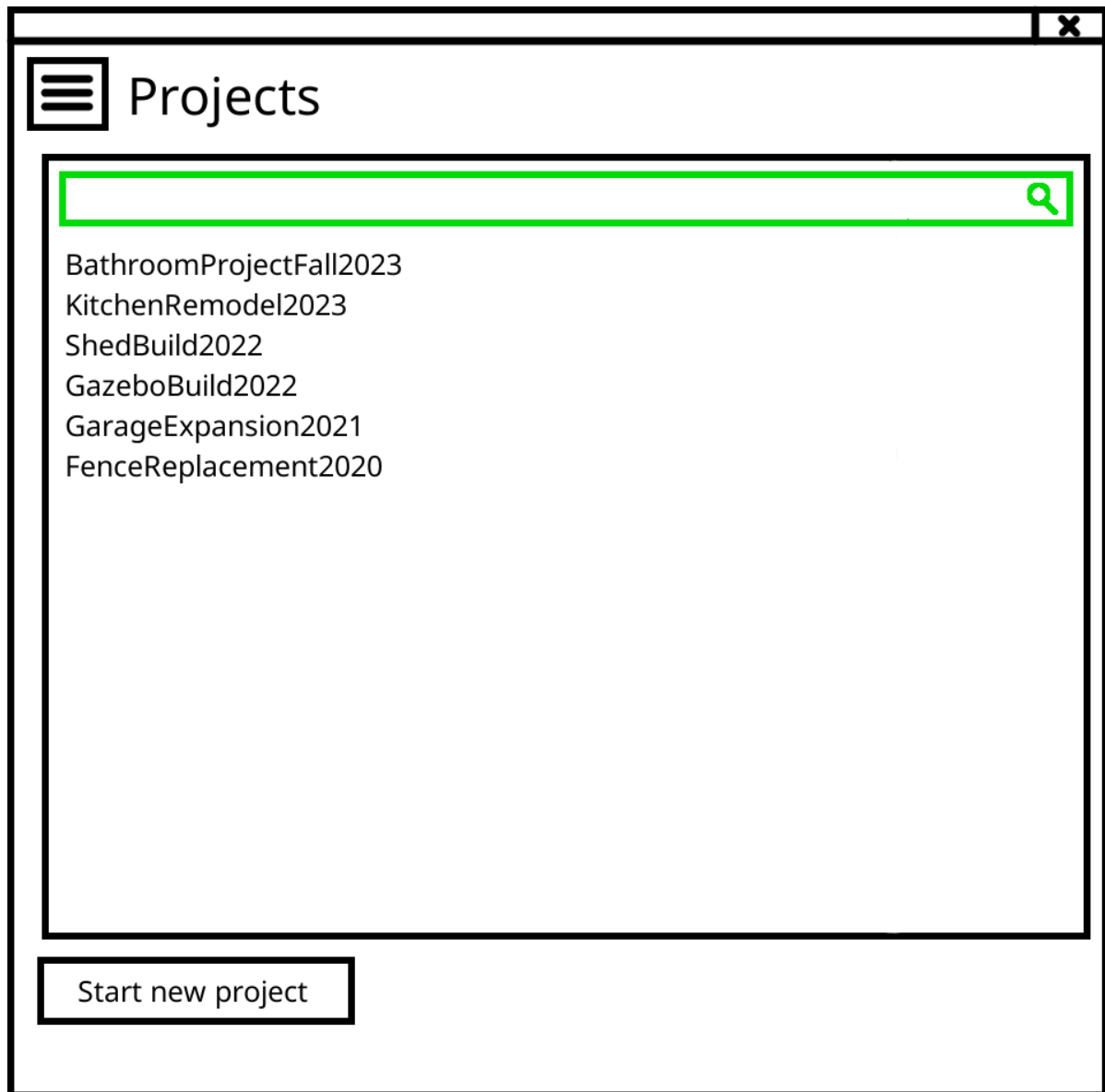
☰ Projects

Shed 🔍

ShedBuild2022

Start new project

Example 3

US03 - As a DIY enthusiast, I'd like to be able to store my purchased tools outside my projects, and reference them inside my projects as needed without having to add them to my budget.

← Projects

Projects

Tools

Materials

Settings

🔍
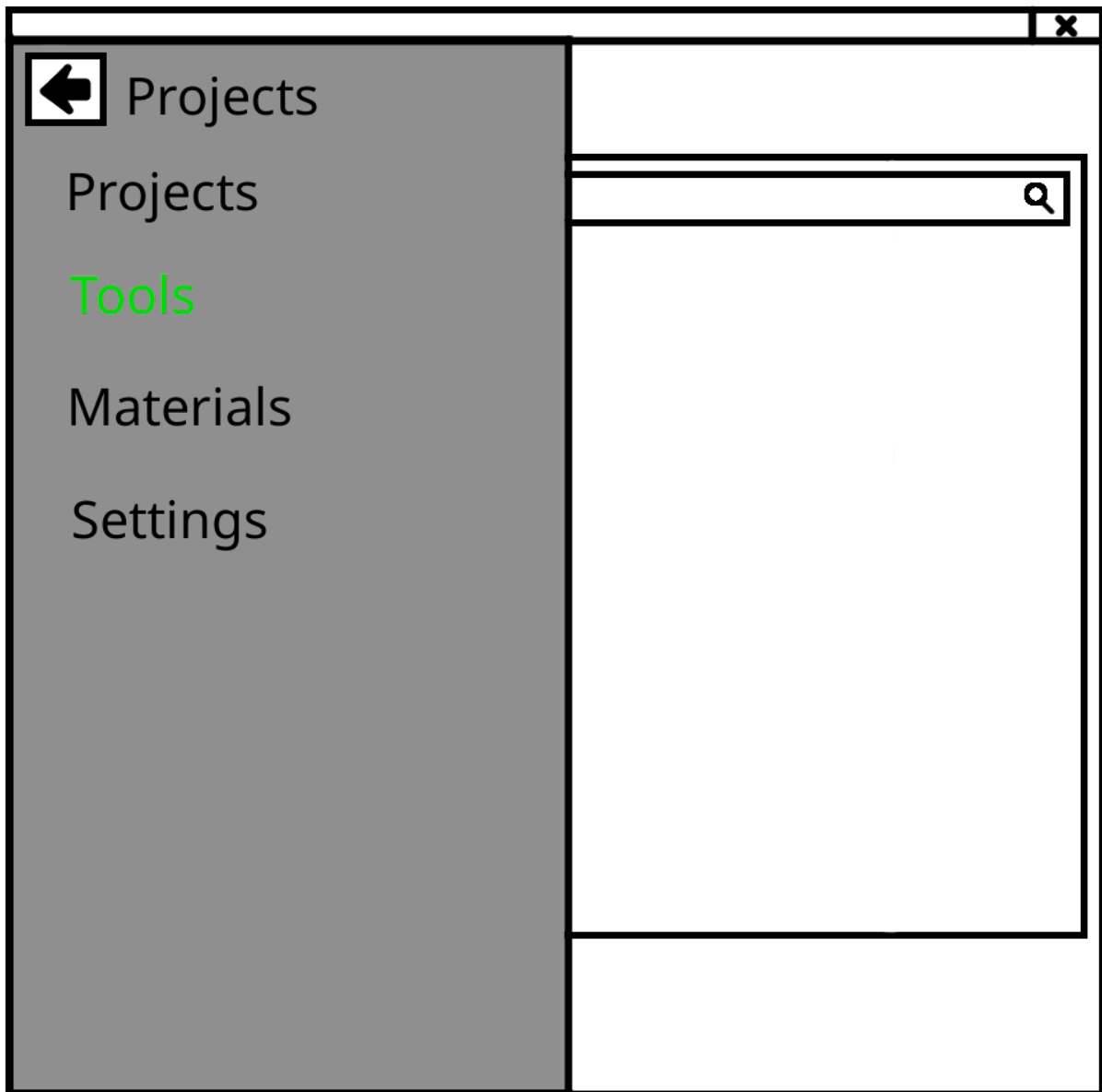
☰ Tools

No tools

Add new tool

New Tool

Tool Name*

Drill

Price

$ 100.00

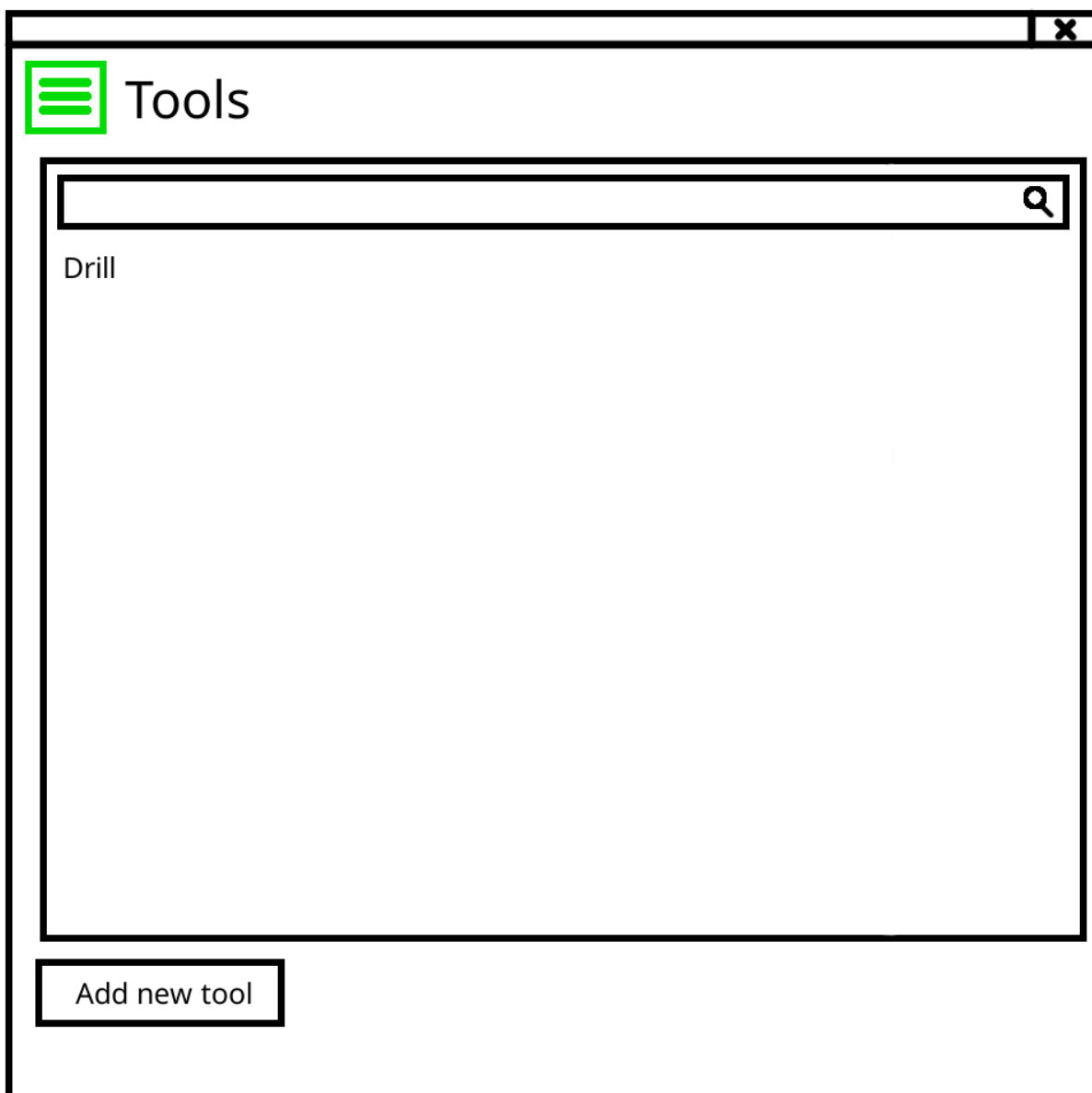## Description

Type here...
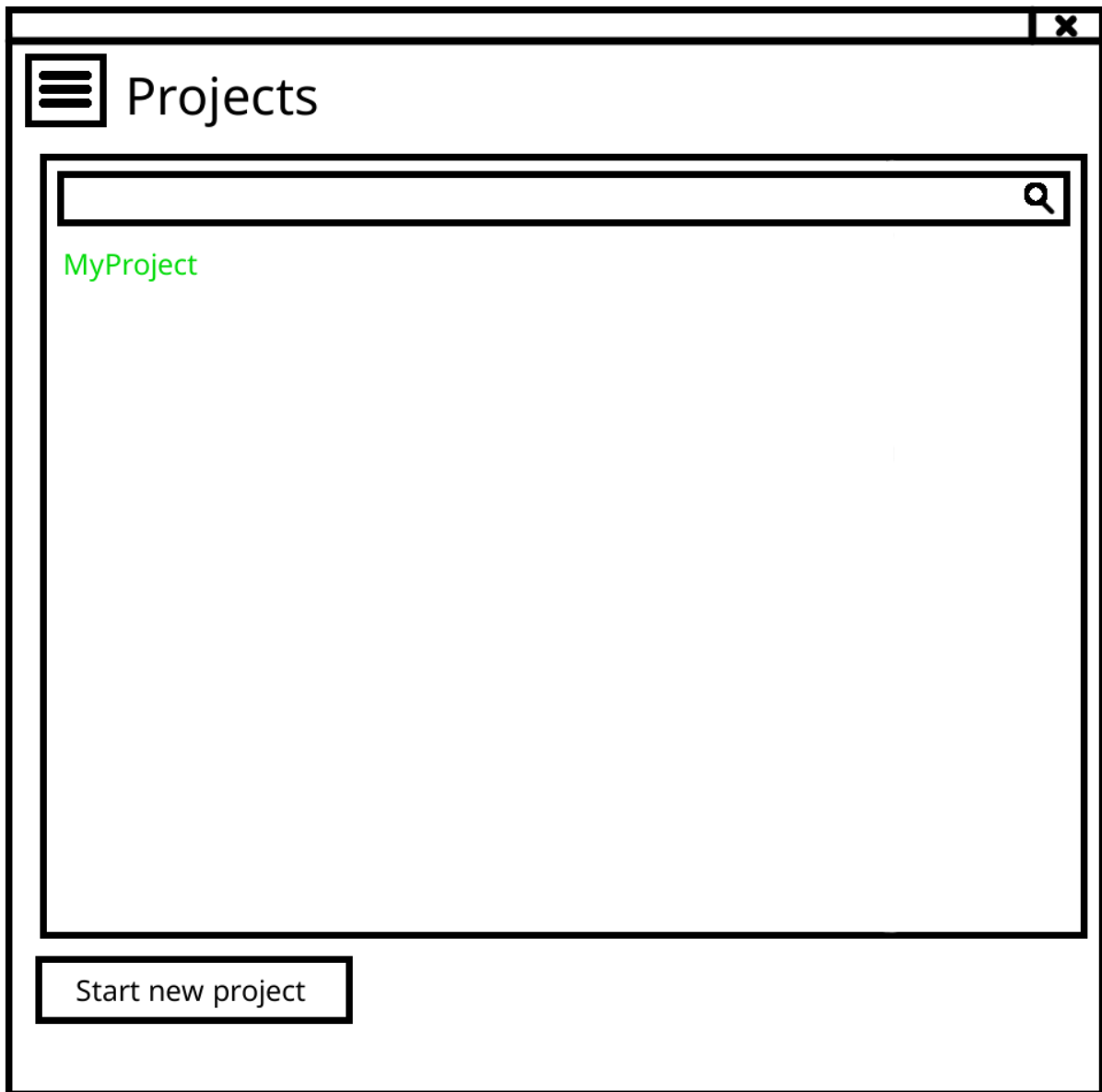
+ New image

*Required fields

Save   Cancel

≡ Tools

Drill

Add new tool

← Tools

Projects

Tools

Materials

Settings

≡ Projects

🔍

MyProject

Start new project

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Add tool

Logs

Date	Name	
10/29/2023	Day 1	◀

Add log

Overview $416.60 / 5,000 No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

🔍

Add tool

Logs

Date	Name
10/29/2023	Day 1	◀

Add log

☰ Overview $416.60 / 5,000 No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

[Add expense]

Logs

Date	Name	
10/29/2023	Day 1	◀

[Add log]

Tools

Type to search... 🔍

Drill

+ Add new

[Add tool]

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Drill 🔍

Drill

Add tool

Logs

Date	Name
10/29/2023	Day 1

Add log

Overview $416.60 / 5,000   No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Drill	🔍

Drill

Add tool

Logs

Date	Name	
10/29/2023	Day 1	◀

Add log

Overview $416.60 / 5,000 No schedule set

Expenses

Category	Name	#	Price/Unit
Flooring	Oak Flooring (10ft)	20	$ 20.83

Add expense

Tools

Name	Expense?
Drill	☐

Add tool

Logs

Date	Name	
10/29/2023	Day 1	◀

Add log

Technical Specifications

Features and Functions

Project files	Provide the ability to store details relevant to a project within a single file for ease of access.
Expense management	Provide a method by which the user can add expenses to a project including but not limited to materials, tools, supplies, and other project related expenses, which should additionally provide a total sum of expenses.
Logs and record-keeping	Provide a method by which users can add a log to a project that allows the user to keep track of progress. This log should include the option to add images to track progress visually.
Search functionality	Provide the user with a method by which they can search for a project using keywords contained within the title or description of a project.
Budget visualization	Provide a method by which the user can visualize how the budget is being used based on diagrams.
Schedule management	Provide the user with a method by which they may set deadlines and add scheduled tasks and goals.
Image attachment	Provide a way to attach images to a project for use in logs, blueprints, plans, documents, etc.

Export	Provide the user with a method by which they can export the contents of a project to a single file.
Import	Provide the user with a method by which they can import the contents of a project from a single file.
Maintenance mode	Provide the user with a maintenance mode that is used for actions that could be dangerous to provide in the standard mode, such as deleting a project.
Categorization of expenses	Provide the user with a method by which they could categorize expenses (such as tool, flooring, paint, etc.) for easier visualization of budget use.
Documentation storage	Provide the user with a method by which they can attach documentation such as warranty information, user guides, etc. to tools and materials for ease of access.
Dark mode	Provide the user with the option to toggle between a "light" mode and "dark" mode.

High Level Design

High level objects: Projects, Tools, Materials

Within Project object: Links to tool objects required for a project, links to material objects used in a project, logs within a project (detailing decisions and progress), images related to project (plans, pictures of progress attached to logs, etc.).

Within Tool objects: Purchase price of tool (for use when adding a tool as an expense to a project), instruction manuals, warranty information, servicing guidelines, attachments (such as the bits purchased for a drill), pictures of tool.

Within Material object: Price of material, quantity/measurement per unit (10 pack, or price by foot, etc.), category of material (flooring, fasteners, furniture, paint, etc.), user guide/instructions, warranty information, servicing guidelines, pictures of material.