

# **Deliverable 1**

## **Requirements & Specification Document**

*404 NOT FOUND*

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[https://404github.github.io/404notfound\\_TCSS360/](https://404github.github.io/404notfound_TCSS360/)

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## **1. Summary**

### **1.1. Introduction**

**1.1.1.** Our team is trying to create an app that can help DIYer in some specification area, to help them decrease some necessary task. Such as collecting data, so that our app can help DIYer analysis their project, by calculating total cost and time cost. Of course, we also offer DIYer's to store their project in their device.

### **1.2. Examples of Use**

**1.2.1.** The target user for our product is DIYer, and some non-professional people who want to do a project about building something. For example, as a DIYer, he can use our product when he wants to set up a project and check how much he needs to pay for that project. He can calculate energy efficiency, too.

## **2. Requirements Definition / Functional Specification**

### **2.1. User Stories**

- 2.1.1.** US01: As a DIYer, I want an app that collects project costs, duration, and other data that I want to put in.
- 2.1.2.** US02: As a DIYer, I want an app that organize my projects to compare many projects at once so I can choose one.
- 2.1.3.** US03: As a DIYer, I want an app that load and saves the projects so I can export and then import to send the information on more than one device.
- 2.1.4.** US04: As a DIYer, I want a website so someone can type in data and get helpful analysis and reports from them.
- 2.1.5.** US05: As a DIYer, I want to be able to sort by the project's costs, duration, and other data that have ranking order.
- 2.1.6.** US06: As a app user, I want an app to help me figure out how much insulation to add and how much it might cost.
- 2.1.7.** US07: As an app user, I want to store the data I put in the app so I can use it later or send it out to a printer.
- 2.1.8.** US08: As an app user, I want an app that would be able to use without data connections.
- 2.1.9.** US09: As a DIYer, I want an app that collects materials and its measurements and dimensions so I can estimate costs and project savings.
- 2.1.10.** US10: As a DIYer,, I want an app to make basic calculations and helps weigh costs versus benefits to size up projects.
- 2.1.11.** US11: As an app user, I want an app that can figure out the material needed.
- 2.1.12.** US12: As an app user, if the link to the server is necessary, I hope that the app would have to enforce secure access an encrypted connection.
- 2.1.13.** US13: As an app user, I would like the app to be user-friendly so that I don't need spend too much time on learning how to use it.
- 2.1.14.** US14: As an app user, I want to use the internet connection to sync information faster on more than 1 device.

### **2.2. Business Rules**

- 2.2.1.** BR01: As a site visitor, I want to see new content when I come to the site, so that I will come back more often.
- 2.2.2.** BR02: As a site visitor, I can access old news that is no longer on the home page, so that I can access things I remember from the past or that others mention to me.
- 2.2.3.** BR03: App must be updated to work

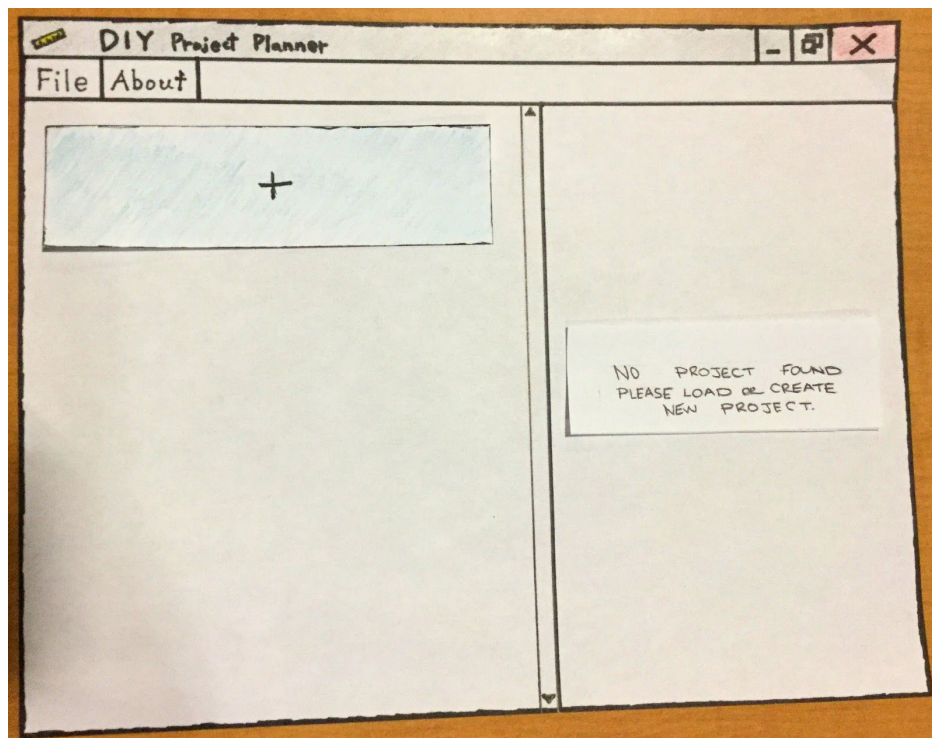
### 3. Paper Prototype

The paper prototype presented in this document is the result of our initial prototype after user testing. The prototype design and functionality has been optimized based on user feedback and implementation practicality.

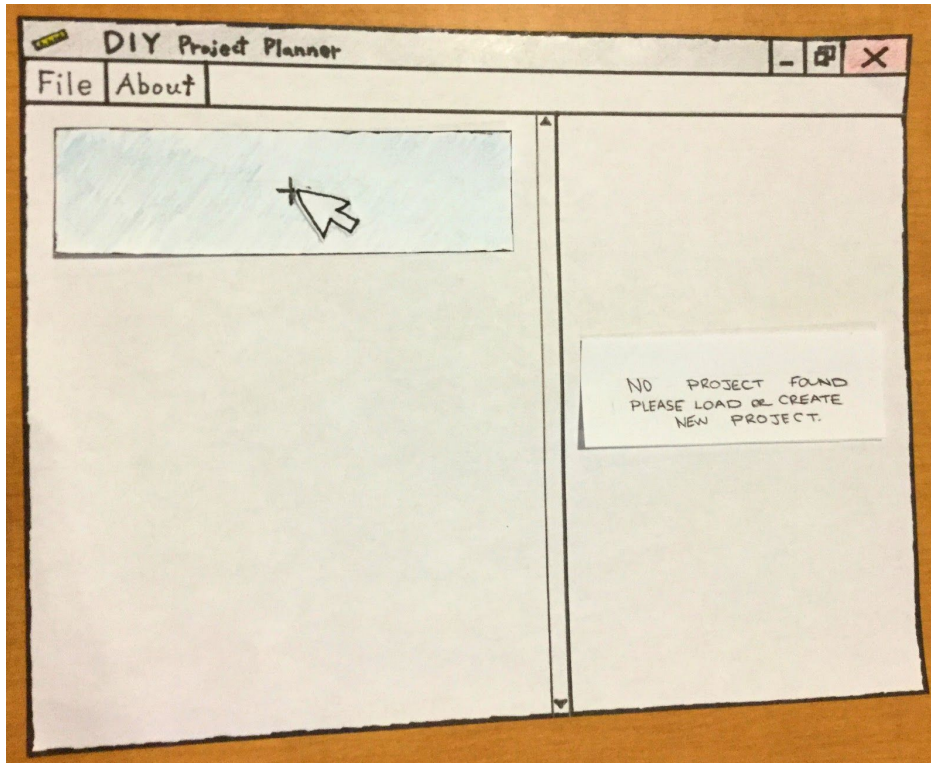
In our paper prototype we have implemented our top three user stories. In the following series of images the functionality will be demonstrated. We will start with our home page upon launching the application. The first task we will perform will be to create a new project. The second task will be opening and saving project collections. The third task will be to edit a projects values. The final task will be to close the application.

#### Three Highest Priority User Stories:

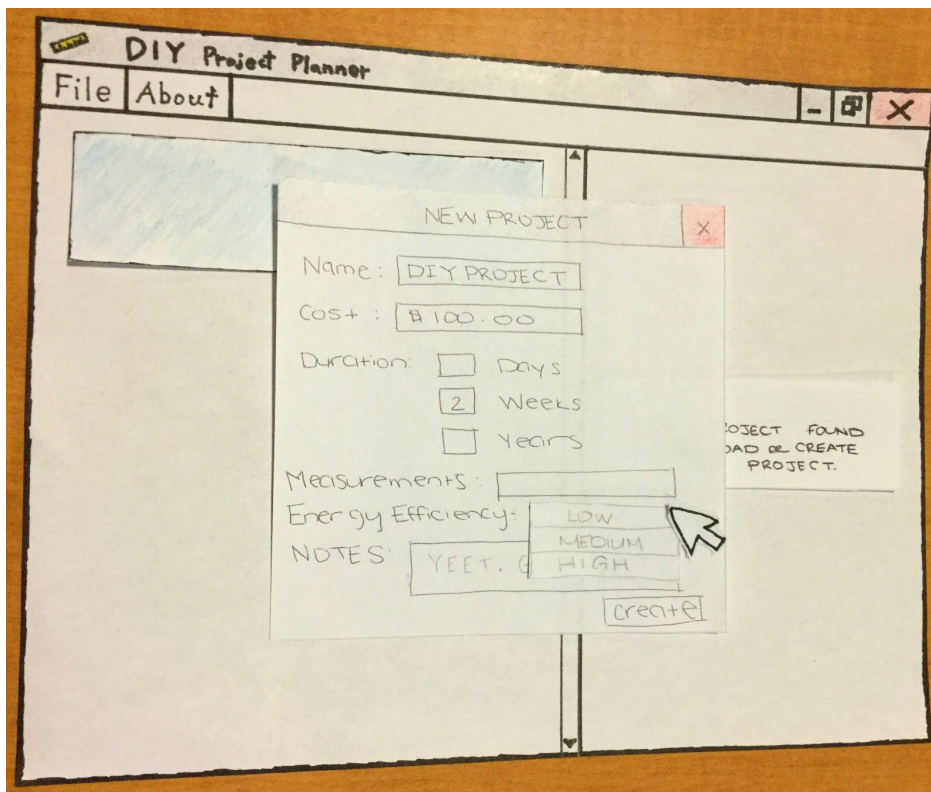
- US01: As a DIYer, I want an app that collects project costs, duration, and other data that I want to put in.
- US02: As a DIYer, I want an app that organize my projects to compare many projects at once so I can choose one.
- US03: As a DIYer, I want an app that load and saves the projects so I can export and then import to send the information on more than one device.



Application home page upon opening.

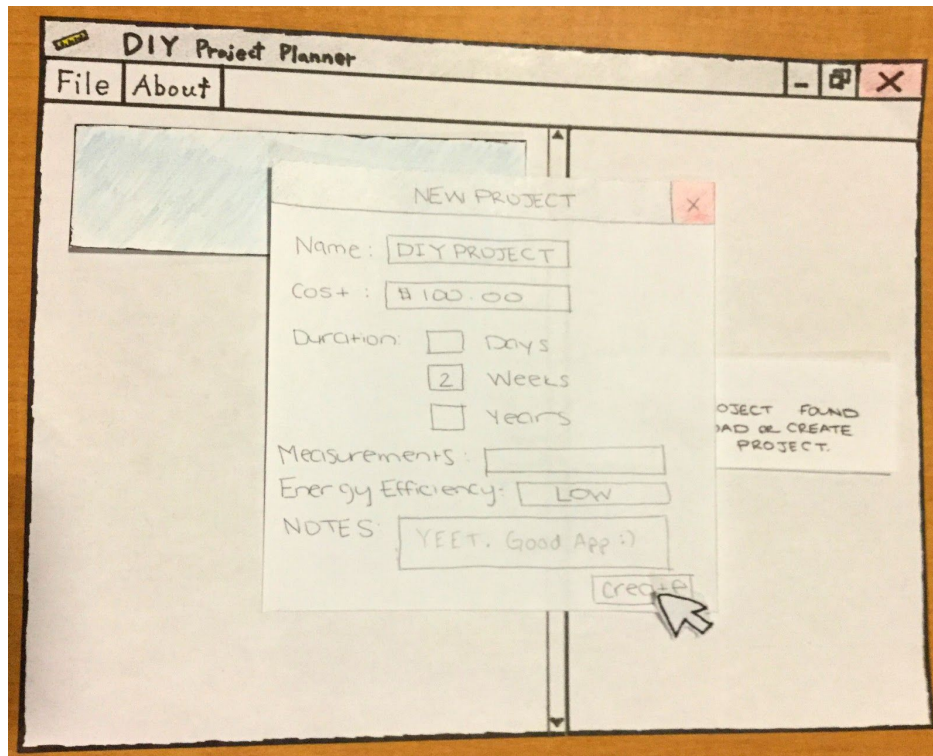


Click new project button.

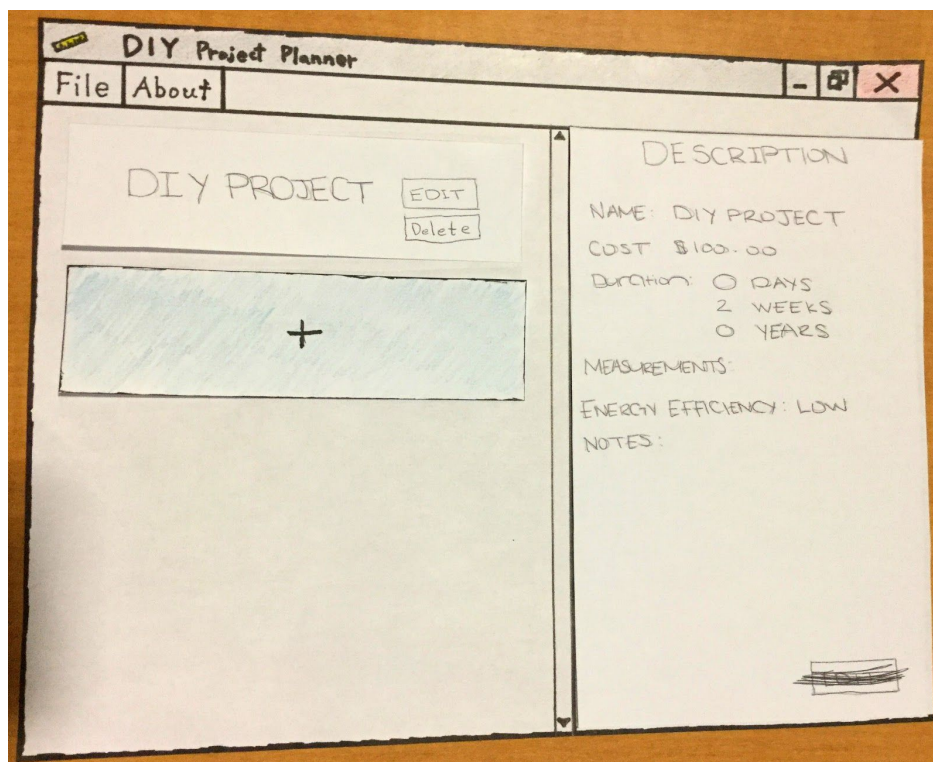


Enter project information.

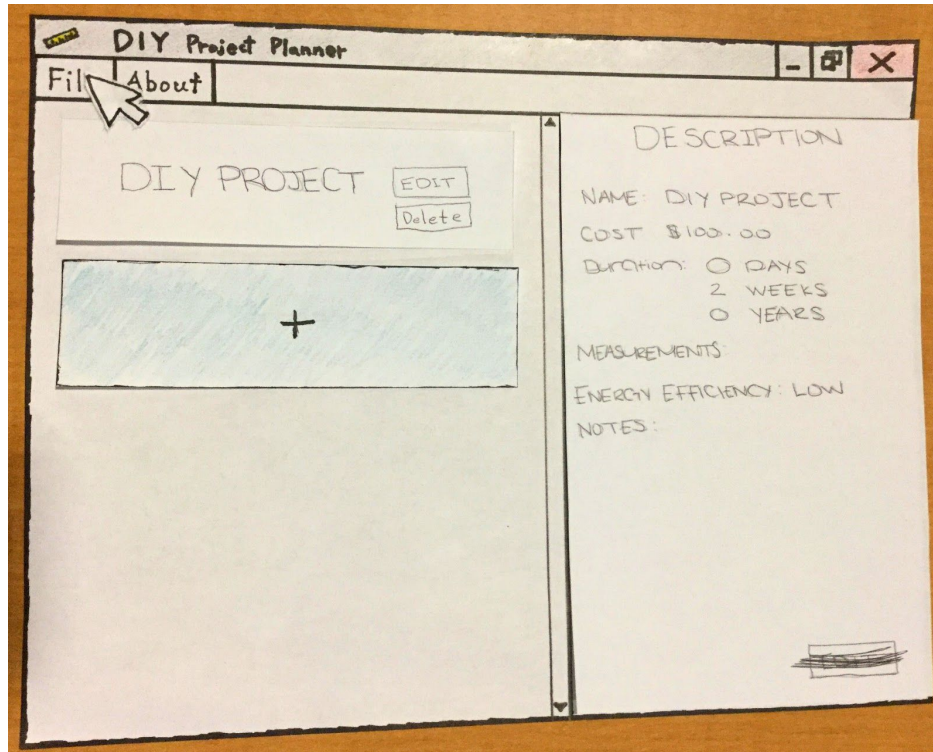




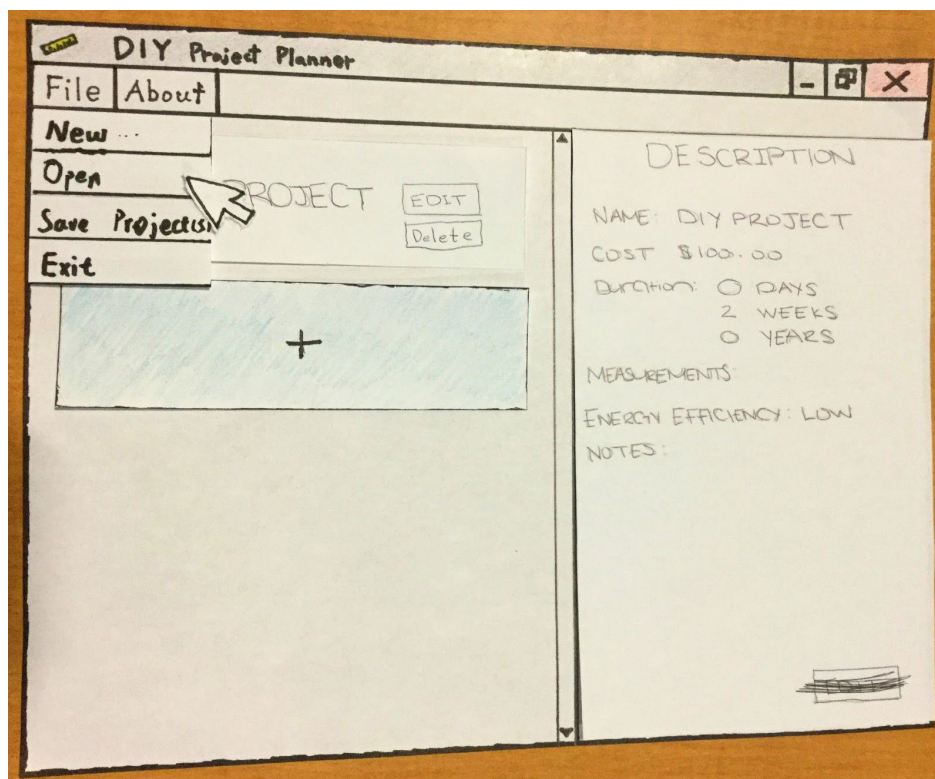
Click create button.



Project added to list (left), project description displayed (right).

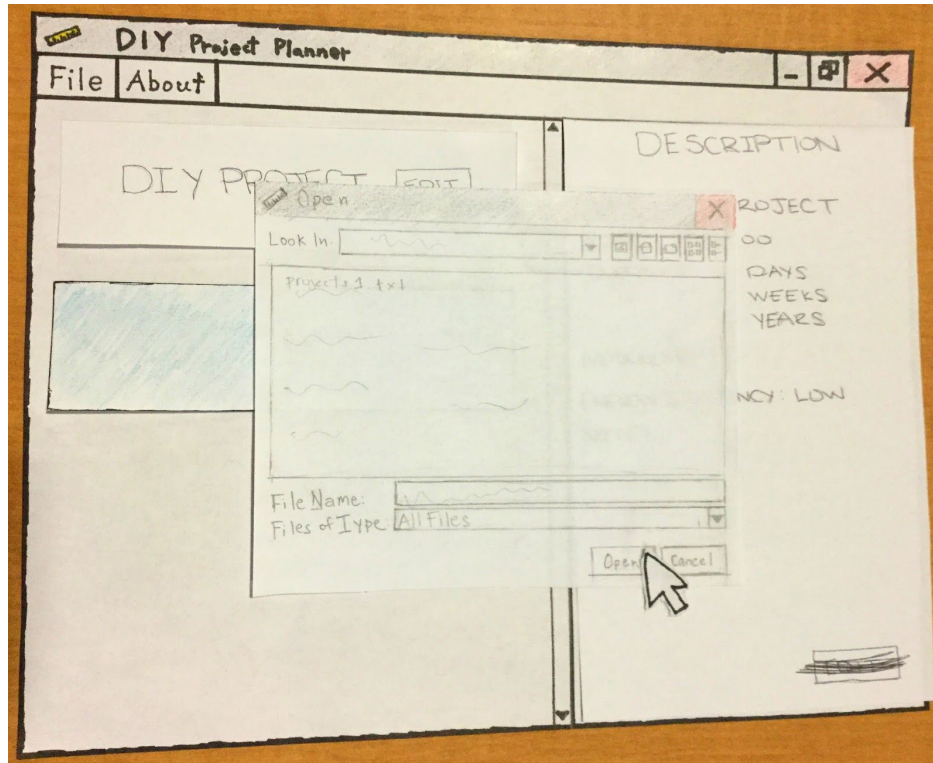


Click file menu in toolbar.

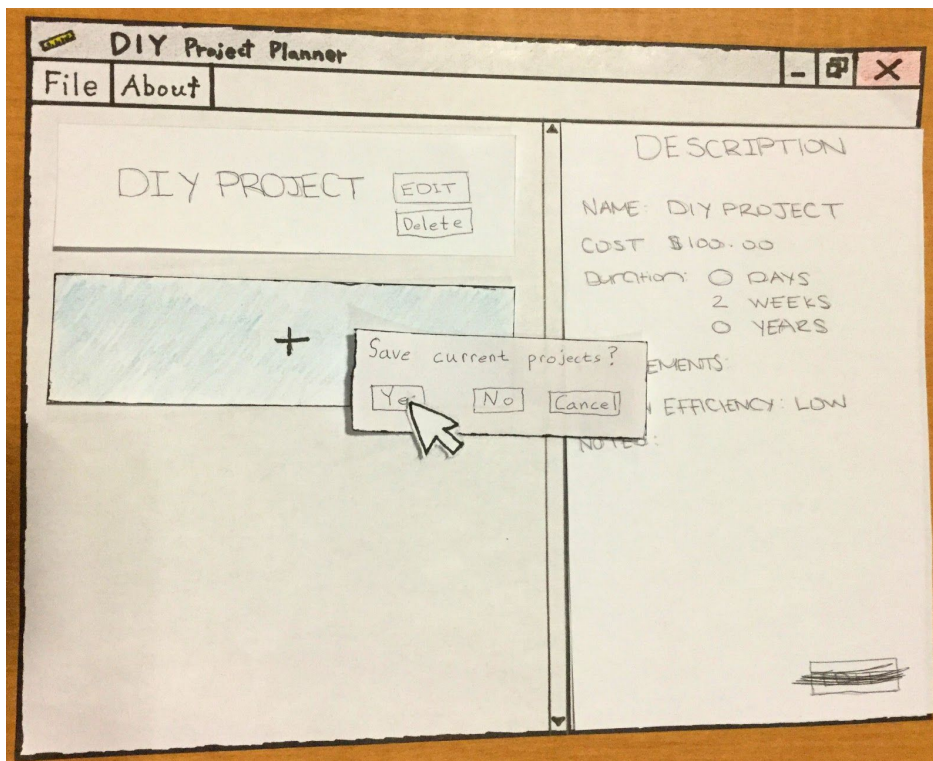


Click open button in file menu.

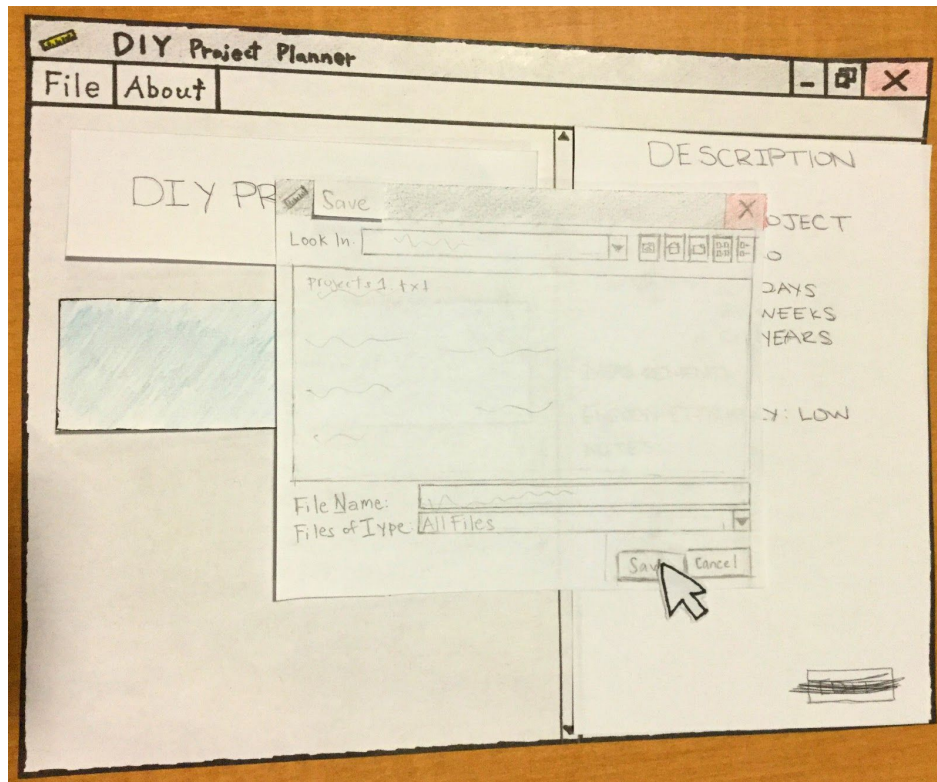




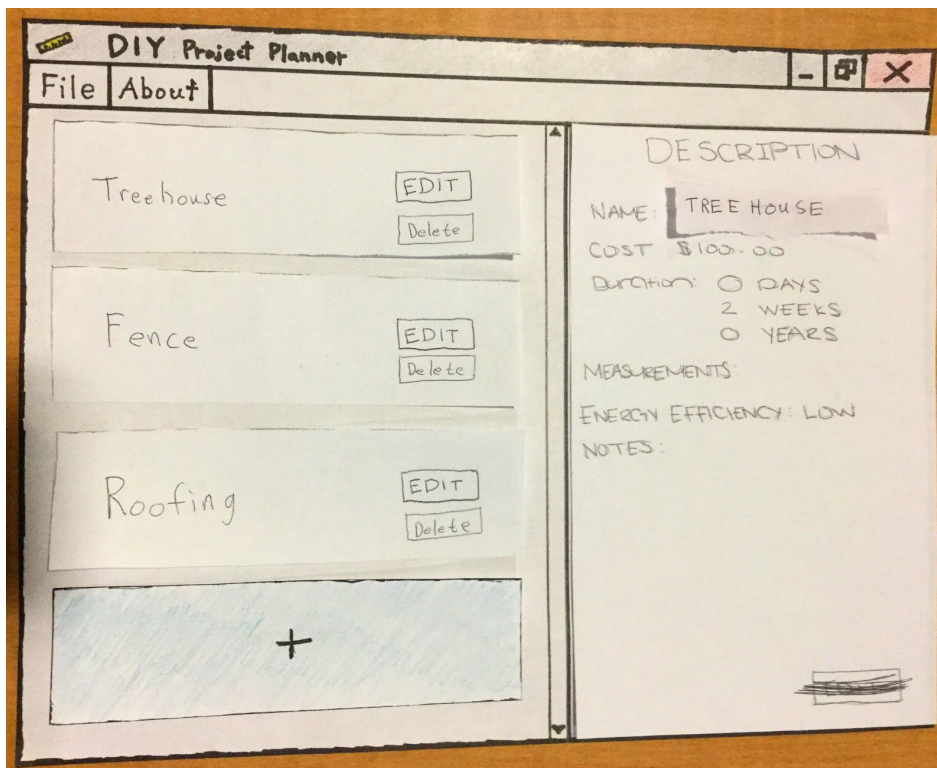
Choose project collection file to open and click open.



Current project collection hasn't been saved, choose to save in warning.

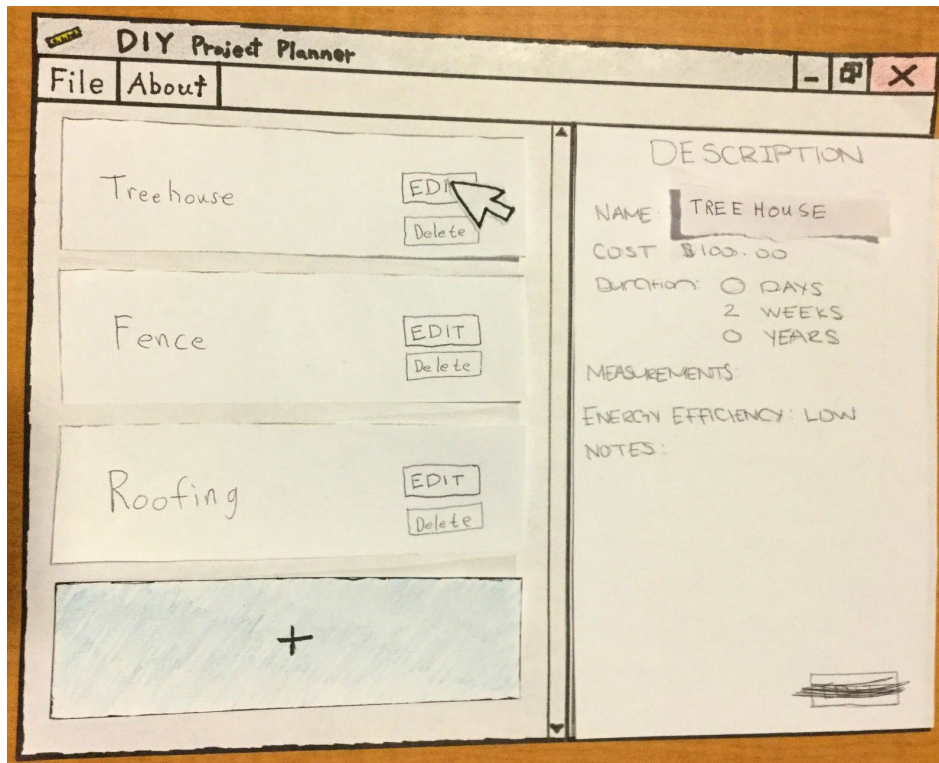


Save current project collection to computer.

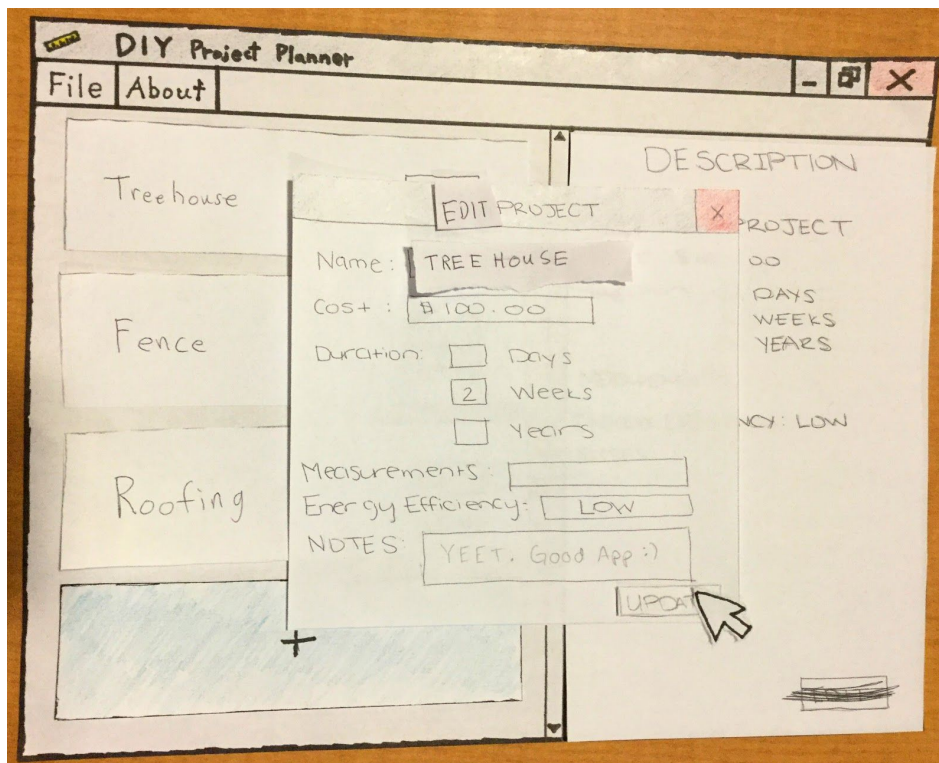


New project collection opened, projects in list (left) & default project description (right).

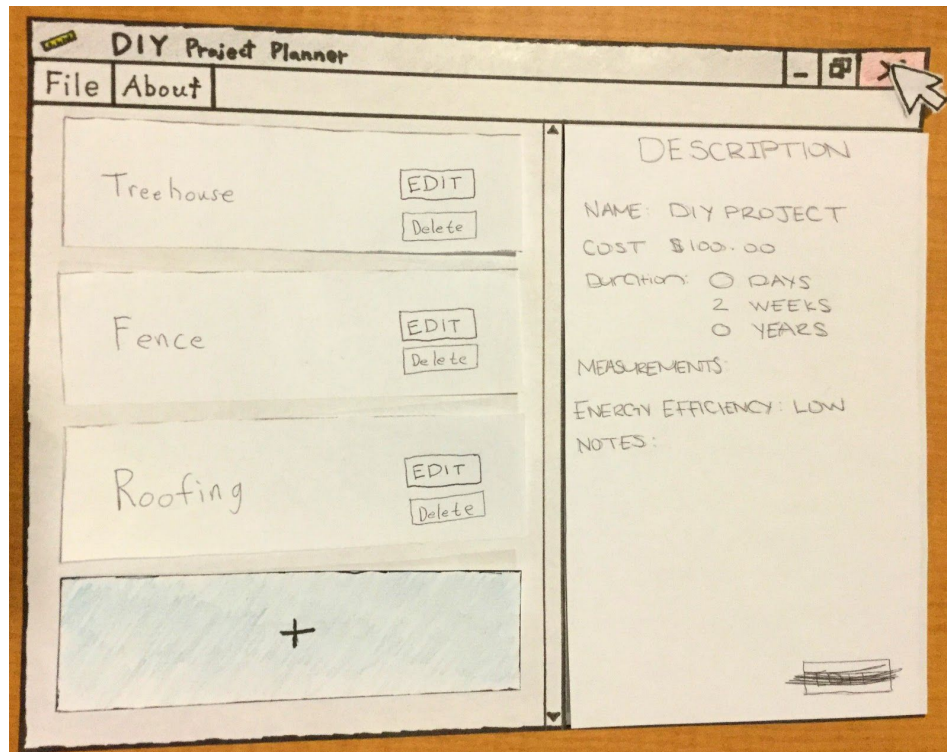




Click edit button on Treehouse project.



Update project information and click update.



Close application.



#### 4. Requirements Specification / Technical Specification

- **Source of Inputs**

There will be a dedicated input form to create or edit an existing project. The user can enter the details of the project such as its name, cost, duration, energy efficiency and measurements data into the form. This form is separated from the main GUI as a pop-up window. The program should also offer a option to load a previous saved “.txt” database file.

- **Destination of Outputs**

On the right hand side of the main window, there will be an area to display the details of a selected project. The user can choose which project to be displayed by clicking any loaded projects. After every user session, the program should write the data to a “.txt” file and save it as the database.

- **Data Format of Inputs**

For the cost of the project, the program should accept any positive decimal values and reject any negative or invalid inputs. The project duration should have separated input fields such as years, months, weeks, days, and hours. Energy efficiency should have three options which are low, medium and high.

- **Window Formats and Organizations**

The main GUI window should have a menu bar which contains the “File” and “Help” tab. In the “File” tab, there should be options to create, load, save and print a project. In the “Help” tab, add a option to show the “About Form” of the program. The body of the main window will have two parts, left and right. Show all loaded projects on the left and information of selected project on the right.