Requirements and Specifications

Dirty Water

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Summary

Thank you for choosing Dirty Water for your project. We hope to design an application which will become an essential tool for your users who wish to start their own Do-It-Yourself project. The application will supply the user with essential tools necessary for any Do-It-Yourself project.

The typical user of this program will be a person who plans to use this application to estimate the cost, the scope, and any benefits the project produces. For example, a person installing heat efficient windows and insulation would estimate the cost of the project and materials then could see the cost of their heating over time.

In one scenario, the user would load a new project with the application. They would then select the type of project they wish to create. They choose to install new windows that would decrease the cost of their heating bill. Next they would add materials to their project. This would lead them to the shopping section if they are connected online otherwise the user would add their own materials manually. After selecting the materials, they are given the cost of the project and can see the total cost overall. They can save the project and print a detailed list of materials. Over time the user can return to the project to input data on their heating bill. This would lead to the user being given a graph of the cost over time.

User Stories and Business Rules

USER STORIES

Top Priorities:

US01. As a DIYer, I want to store data and measurements for my DIY projects so I can refer to them any time.

US02. As a homeowner, I want to document my home's energy efficiency.

US03. As a user, I want to make price calculations based on the data I assemble so I can estimate project costs.

All (by priority):

US04. As a user, I want to be able to print my project data.

US05. As a homeowner, I want to know how long it will take for the energy savings to pay back the costs of potential home improvement projects.

US06. As a DIYer, I want to compare energy savings of potential home improvement projects to each other to choose which one I want to do.

US07. As a user, I want to compare prices and technical information about products being considered.

US08. As a manufacturer/retailer, I want to promote my products and services.

US09. As a developer, I want to be able to update company price rates and reputation ratings. (NFR Maintainability)

US10. As a user, I want to have the ability to sync my data online as a backup. (NFR Recoverability)

US11. As a user, I want to export my data in the form of a report so I can save it as a backup of my data or forward the report to contractors, energy audit professionals, retailers, or promotional programs.

US12. As a user, I want to download an application to my own private device with all data kept private.

US13. As a user, I want the program to read my electricity bill.

US14. As a user, I want the program to read my electric meter.

BUSINESS RULES

BR01. When a business sends an advertisement, the program should be able to convert the information into a material the user can add. (US08)

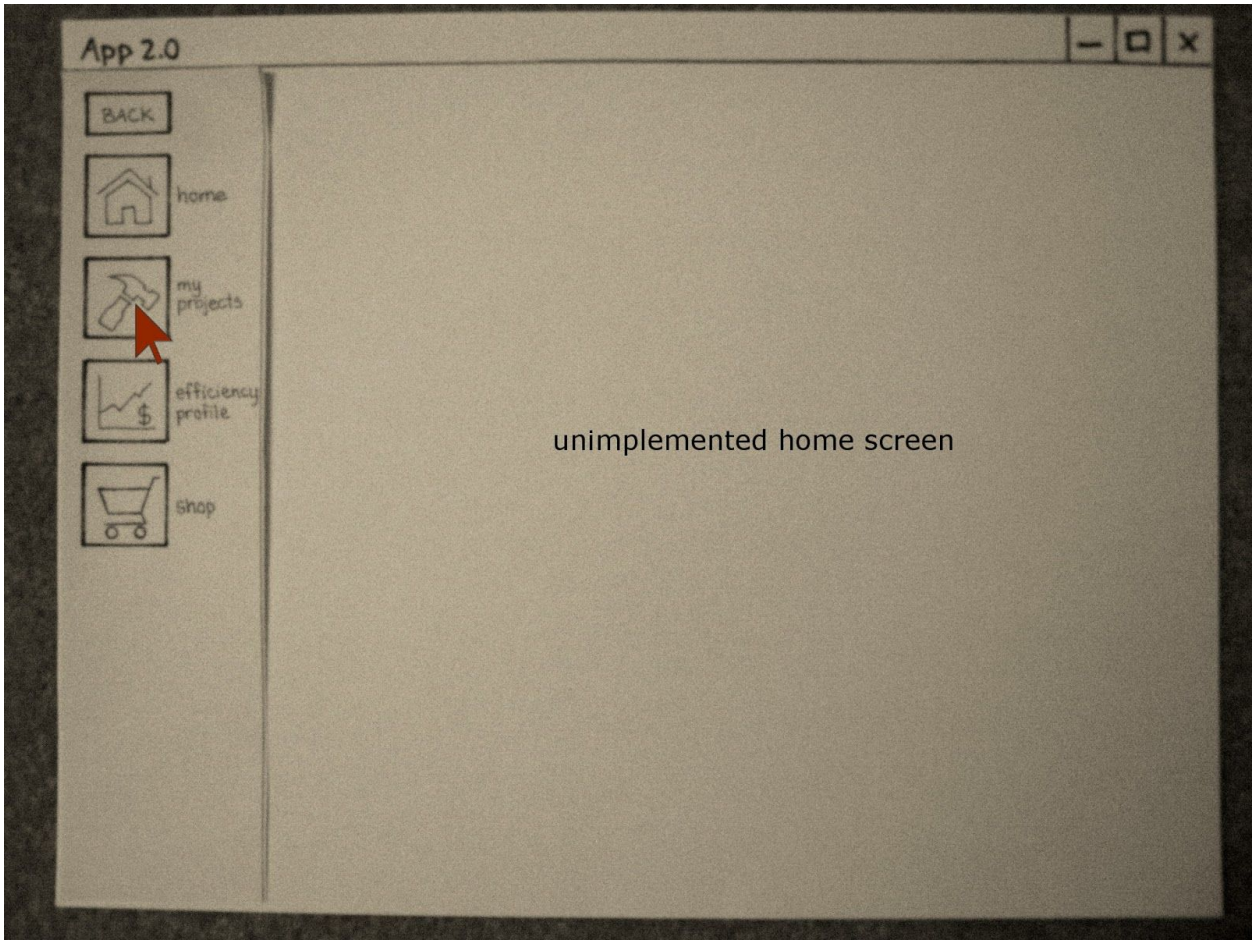
BR02. When the user exports their data, the program should have some control of how that personal information is formatted and included. (US11)

BR03. When the user uses the application, it should be able to perform without connection to the internet. (US12)

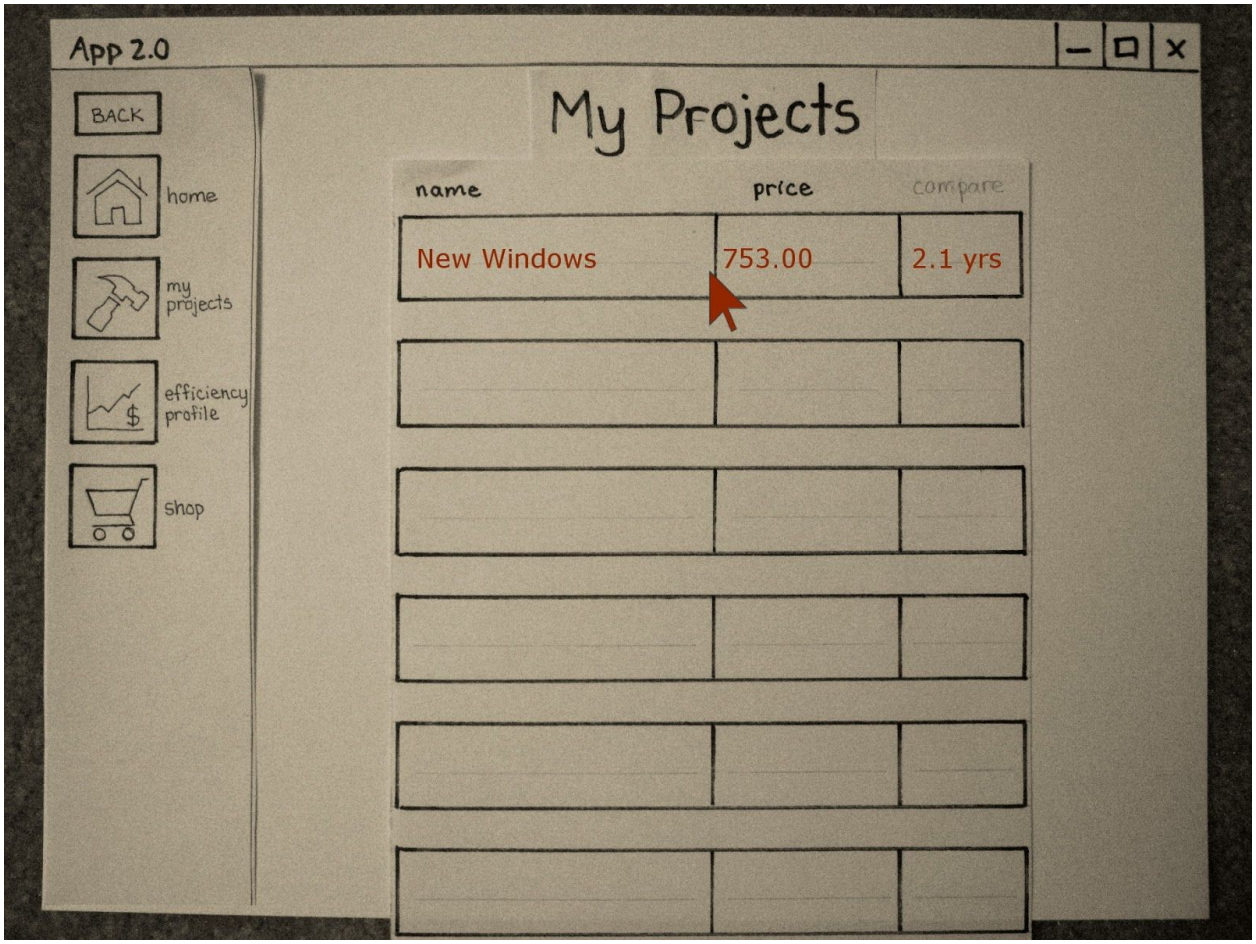
Paper Prototype

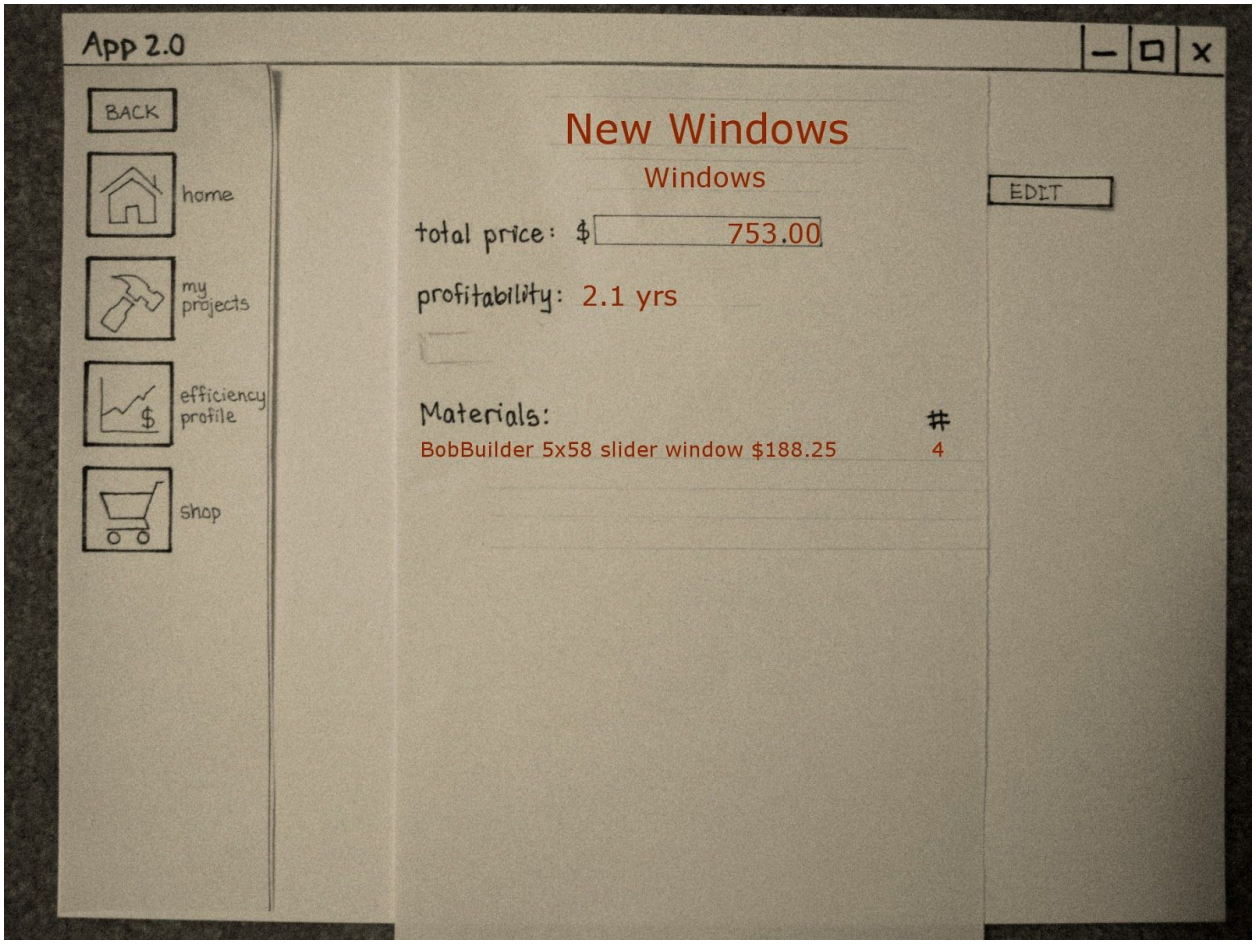
US01. As a DIYer, I want to store data and measurements for my DIY projects so I can refer to them any time.

Storing and reviewing past project data is done by opening the my projects tab and then selecting the relevant project from the list. This displays the project details including data on profitability, price and materials used.



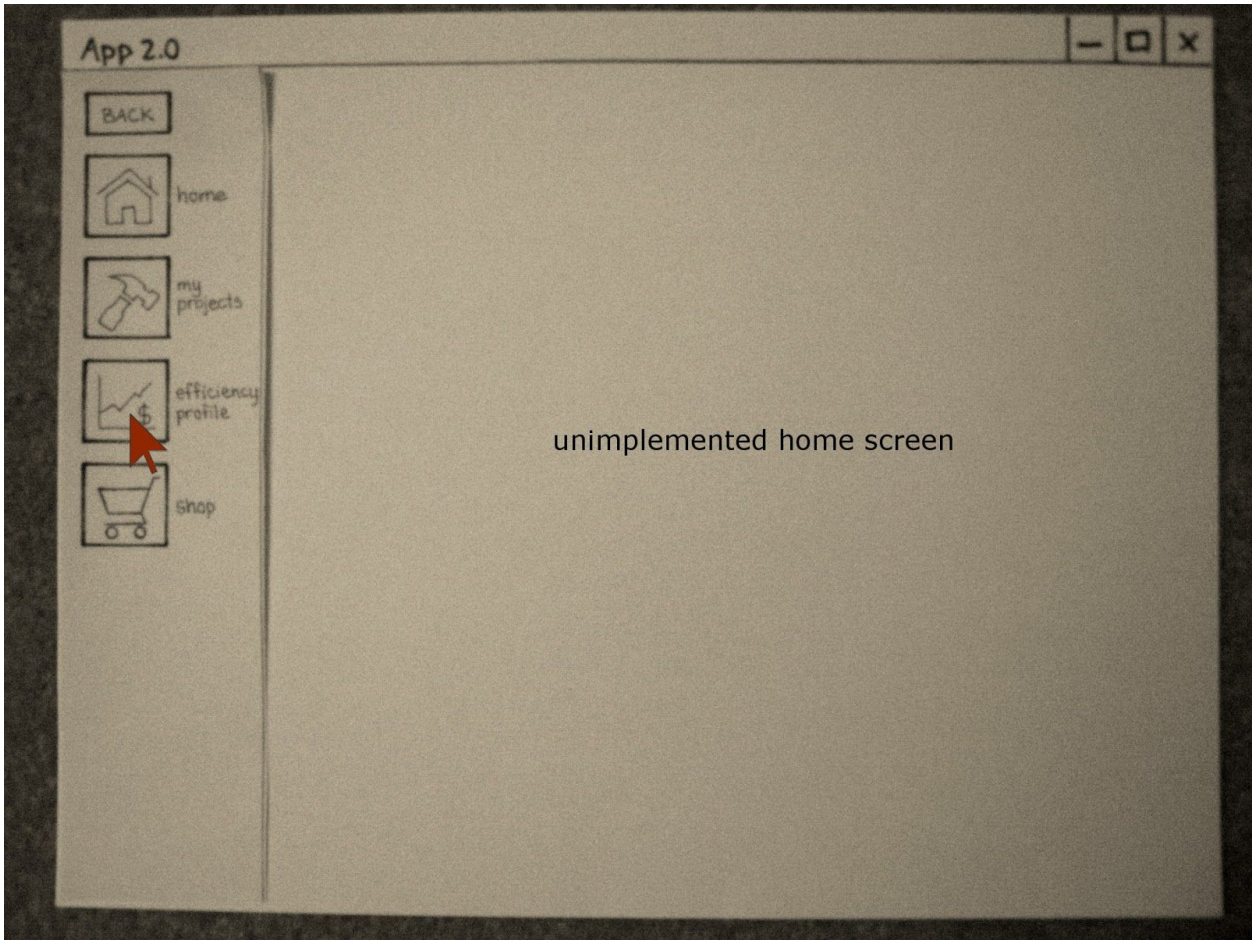
Each existing project can be clicked to show the details of that project.

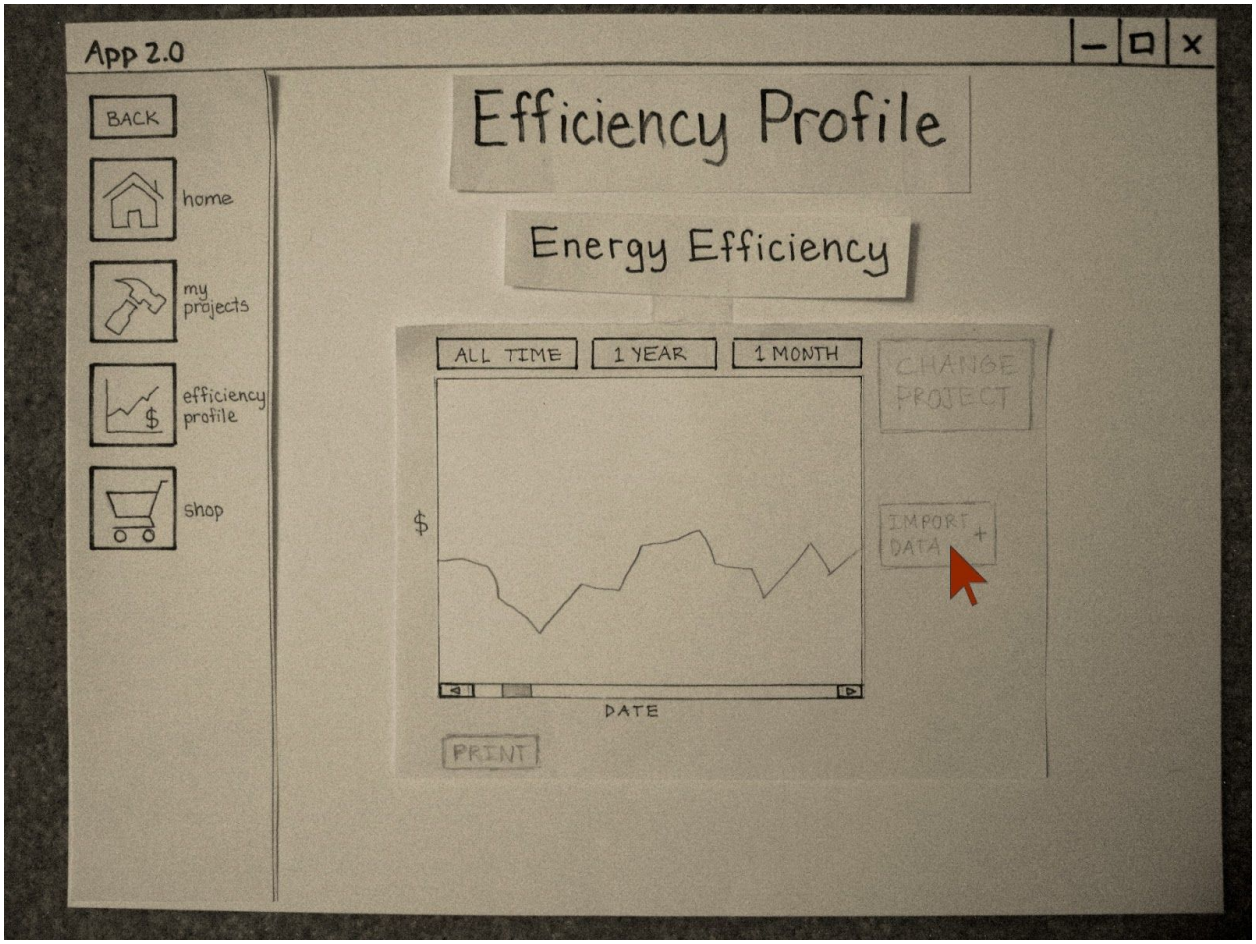


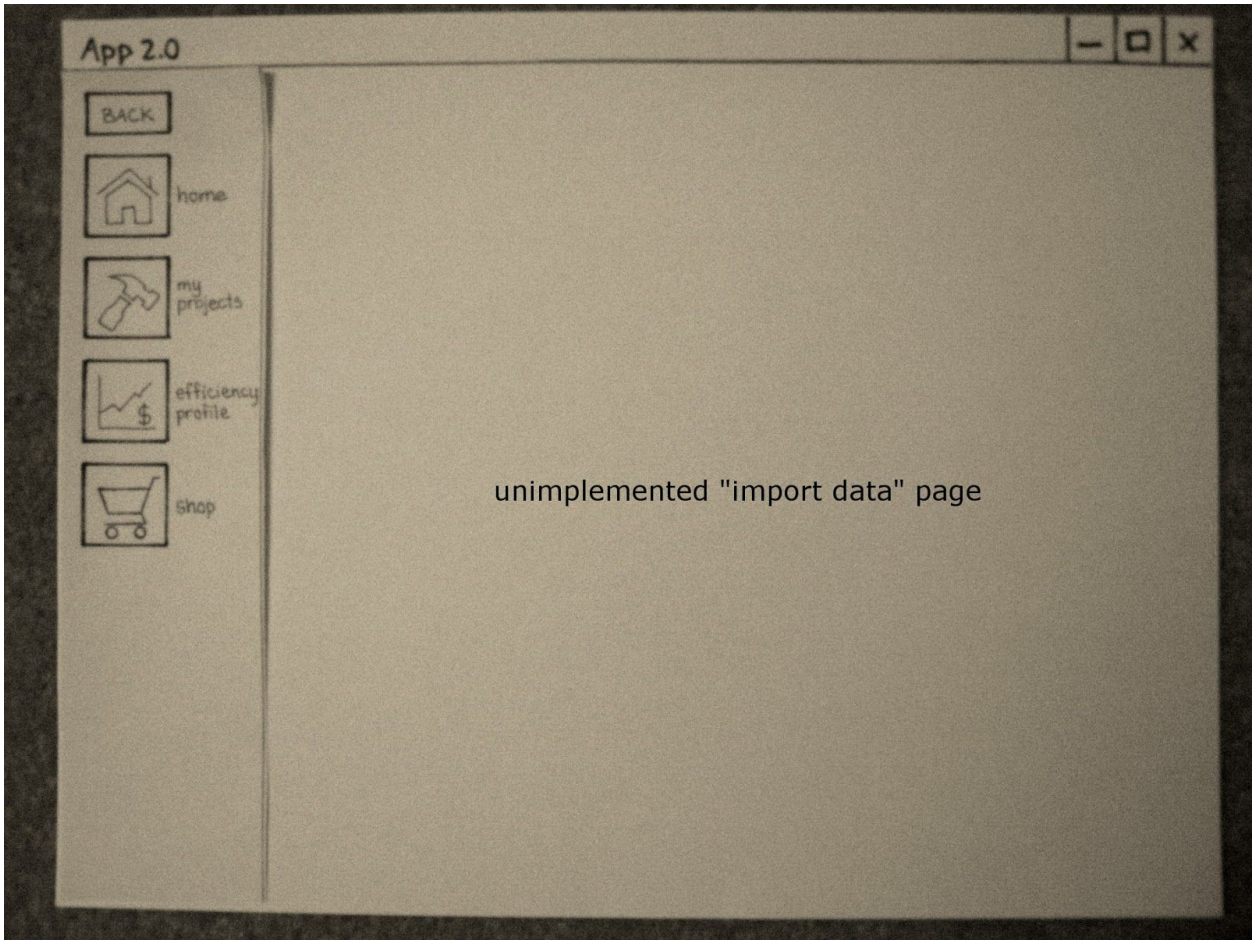

App 2.0
BACK
home
my projects
efficiency profile
shop
New Windows
Windows
EDIT
total price: $ 753.00
profitability: 2.1 yrs
Materials:
#
BobBuilder 5x58 slider window $188.25
4

US02. As a homeowner, I want to document my home's energy efficiency.

The home's energy efficiency can be documented through existing projects or imported. Importing data will update the graph to show the efficiency and cost from the saved file. Different project documentation can be compared here and information is listed for a selected time period.
Users can also access project details to get information on costs and see how that relates to their energy efficiency.

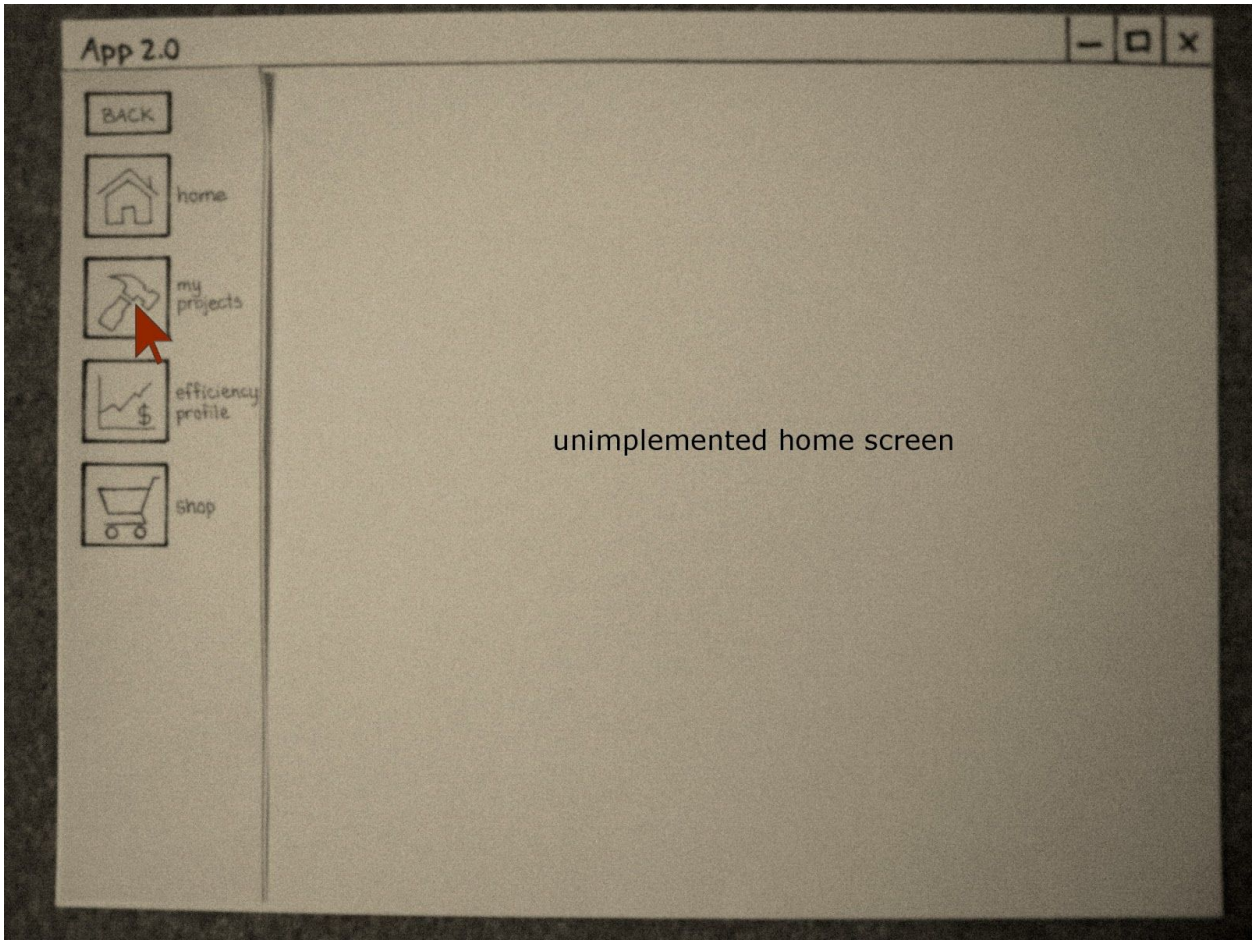


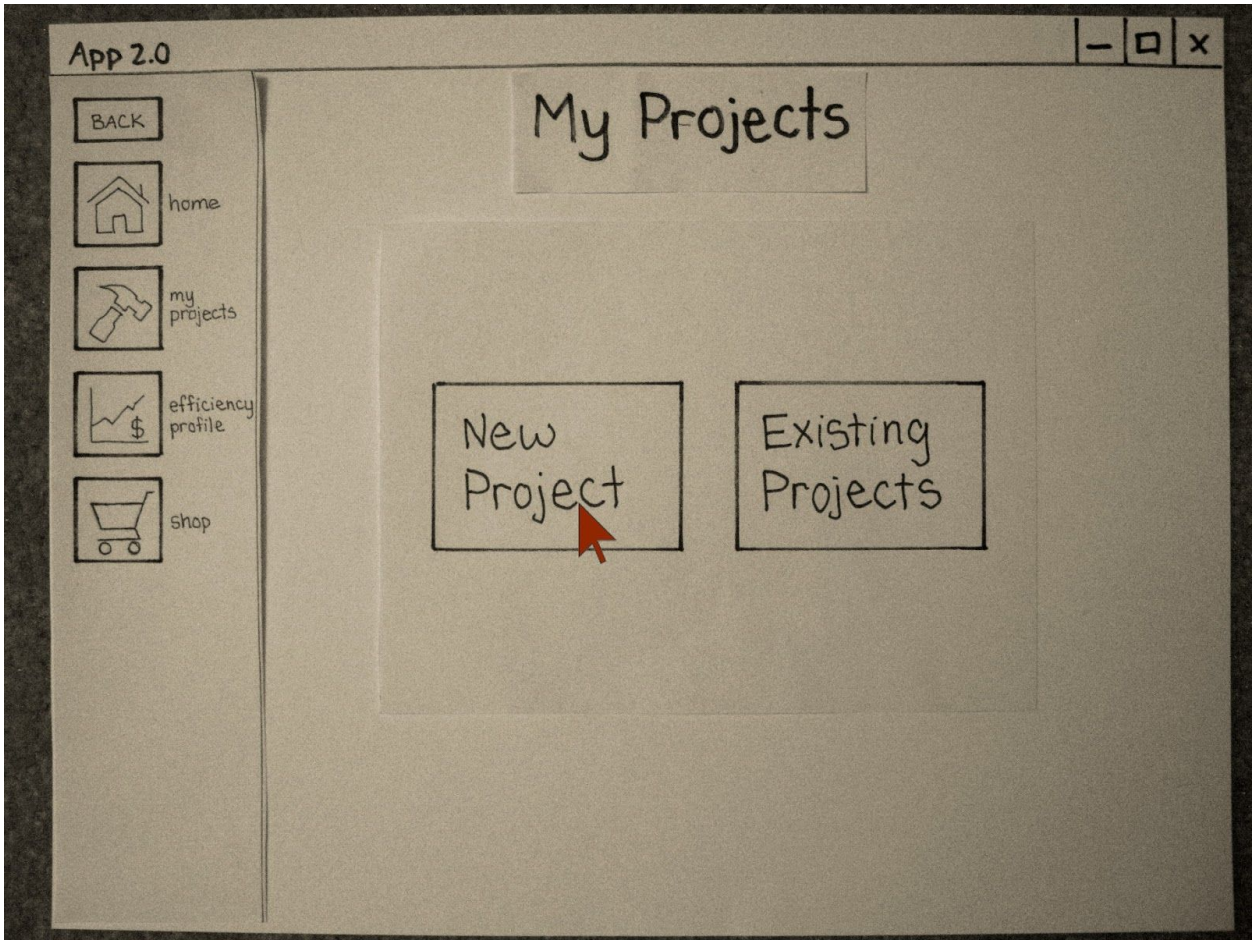

App 2.0
BACK
home
my projects
efficiency profile
shop
Efficiency Profile
Energy Efficiency
ALL TIME
1 YEAR
1 MONTH
CHANGE PROJECT
$
IMPORT DATA +
DATE
PRINT

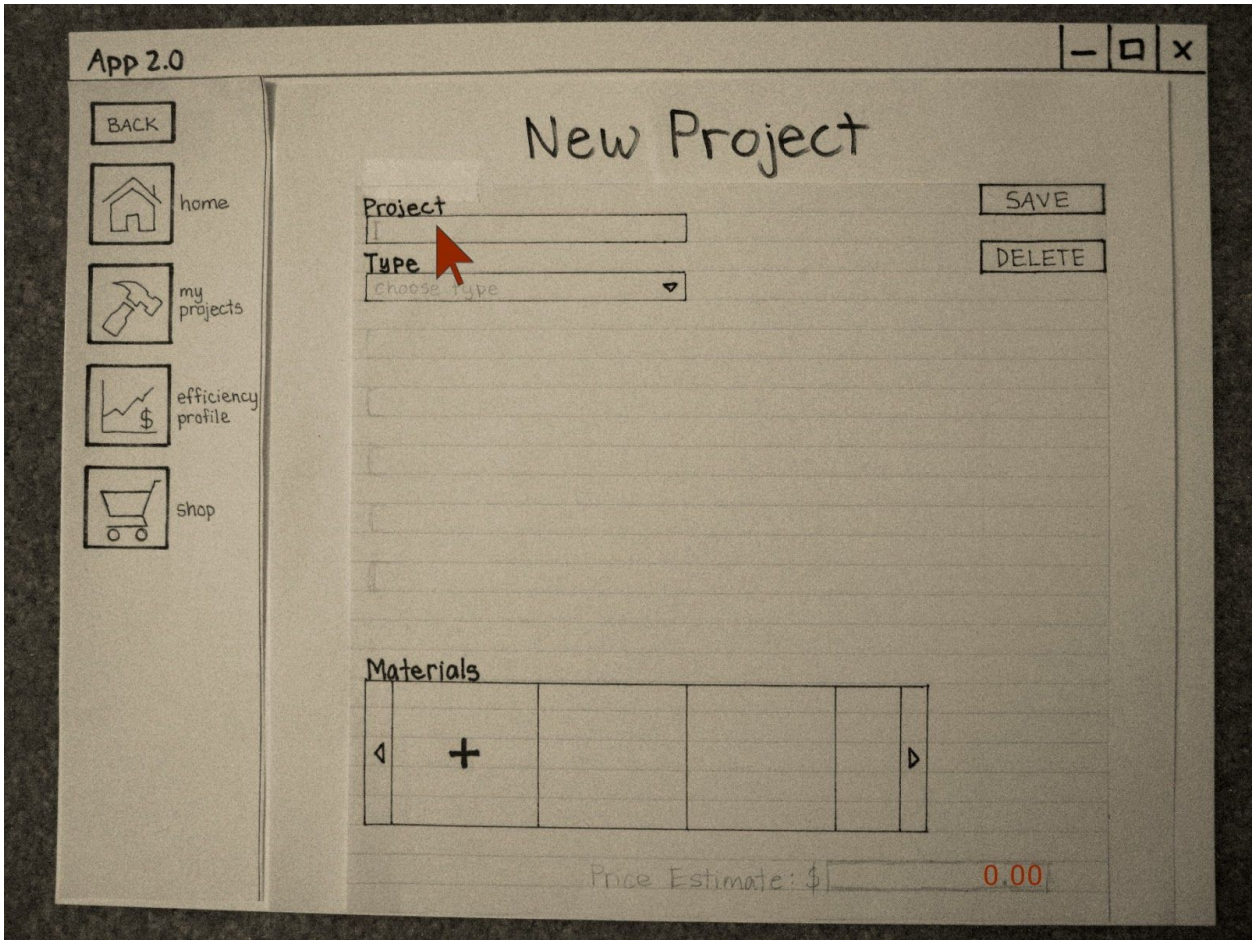

App 2.0
BACK
home
my projects
efficiency profile
shop
unimplemented "import data" page

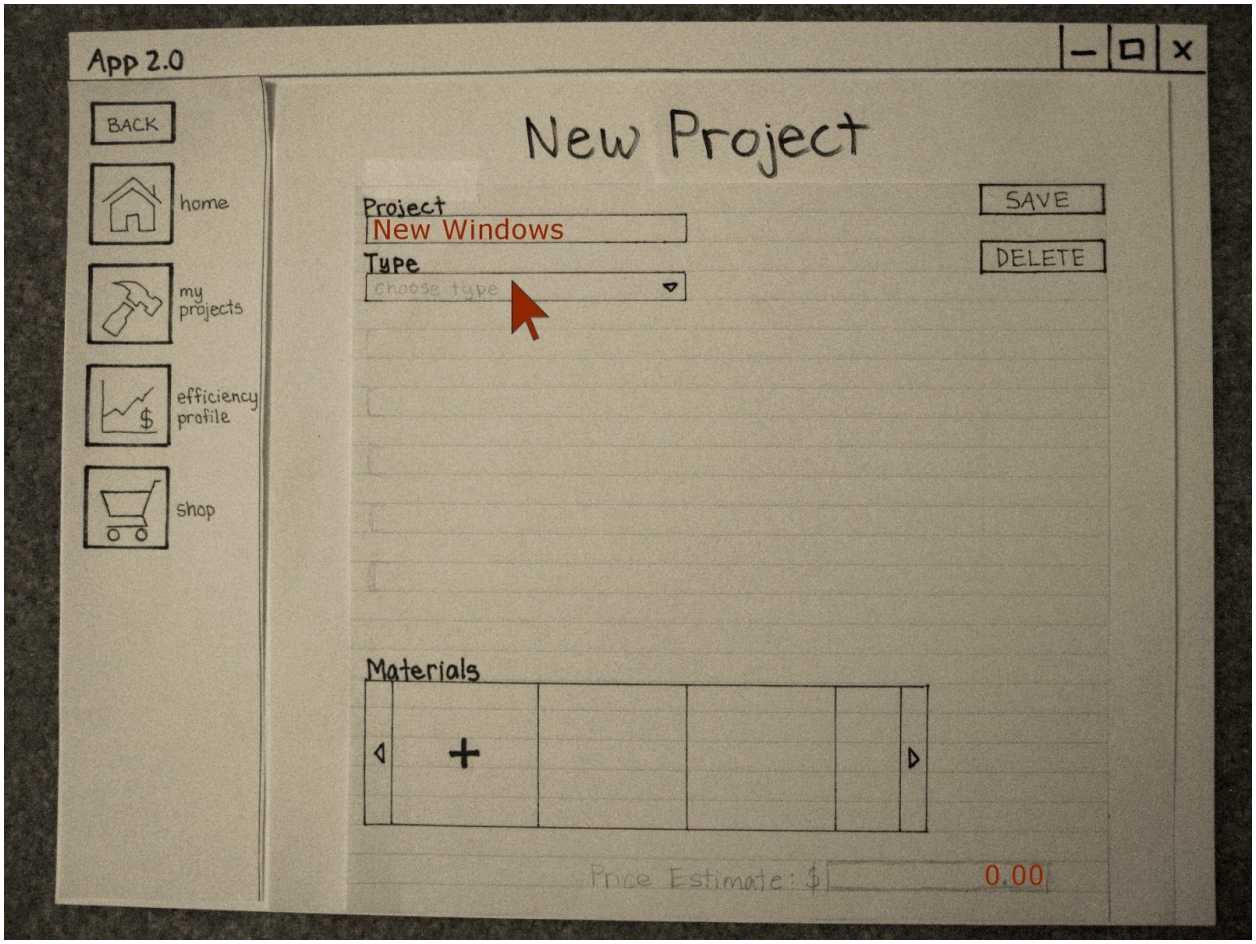
US03. As a user, I want to make price calculations based on the data I assemble so I can estimate project costs.

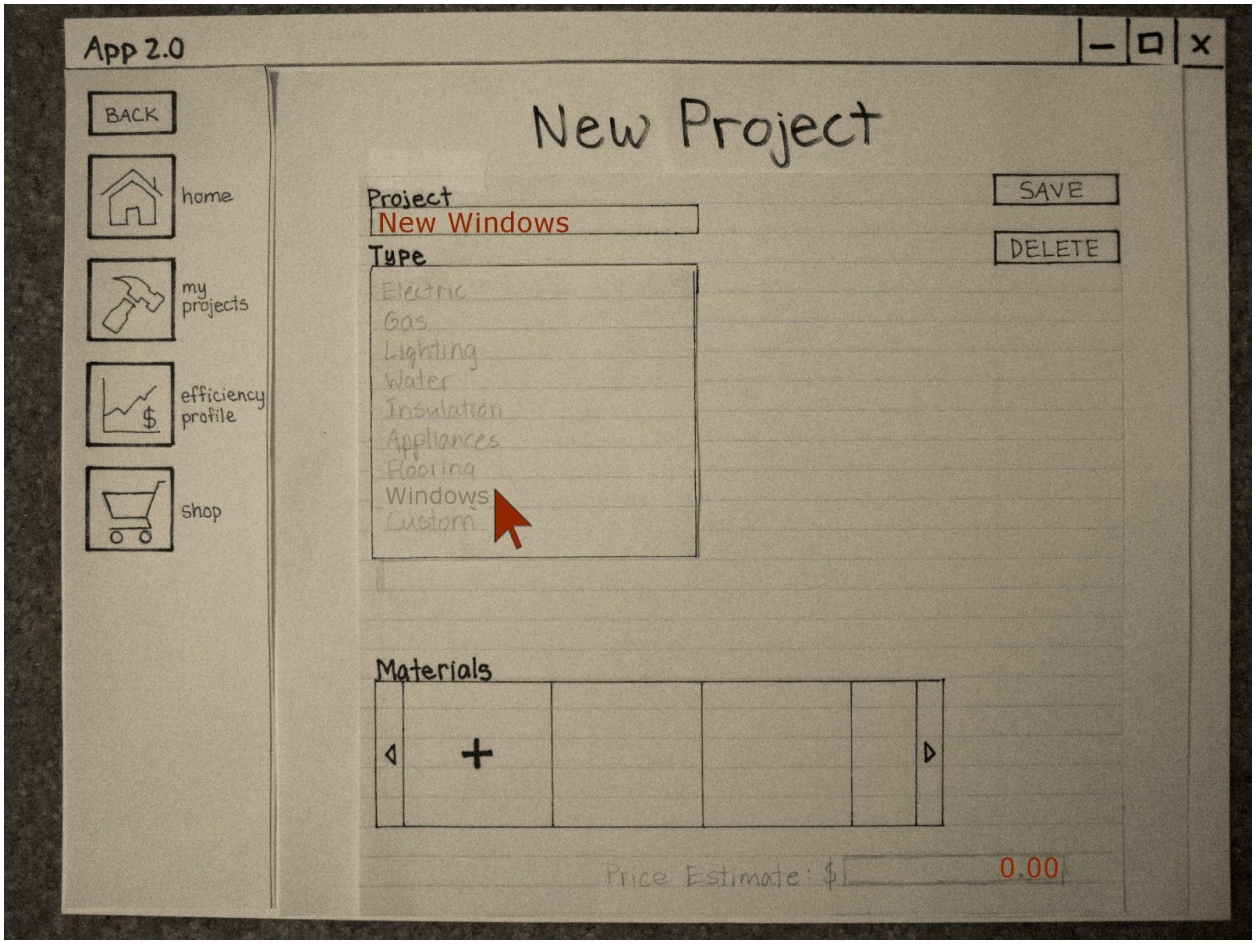
In this example the user wants to see an estimated cost for a project requiring four sliding windows.
Once all materials have been added the user can see the estimated cost for their project.
After materials for the project have been added they can be removed or updated by clicking their image in the materials slider.
Projects can be updated or deleted by choosing "existing projects" after opening my projects from the side bar.

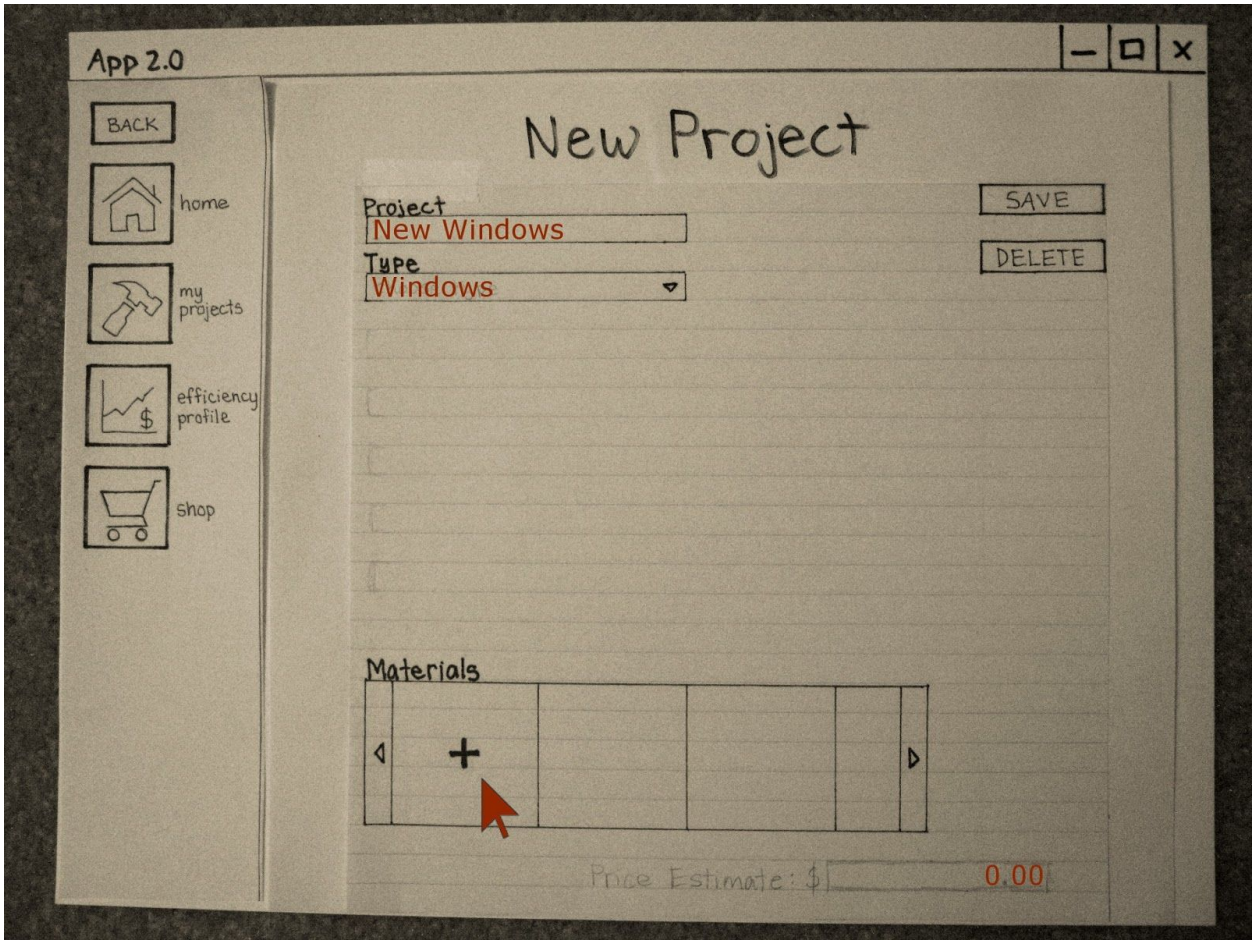


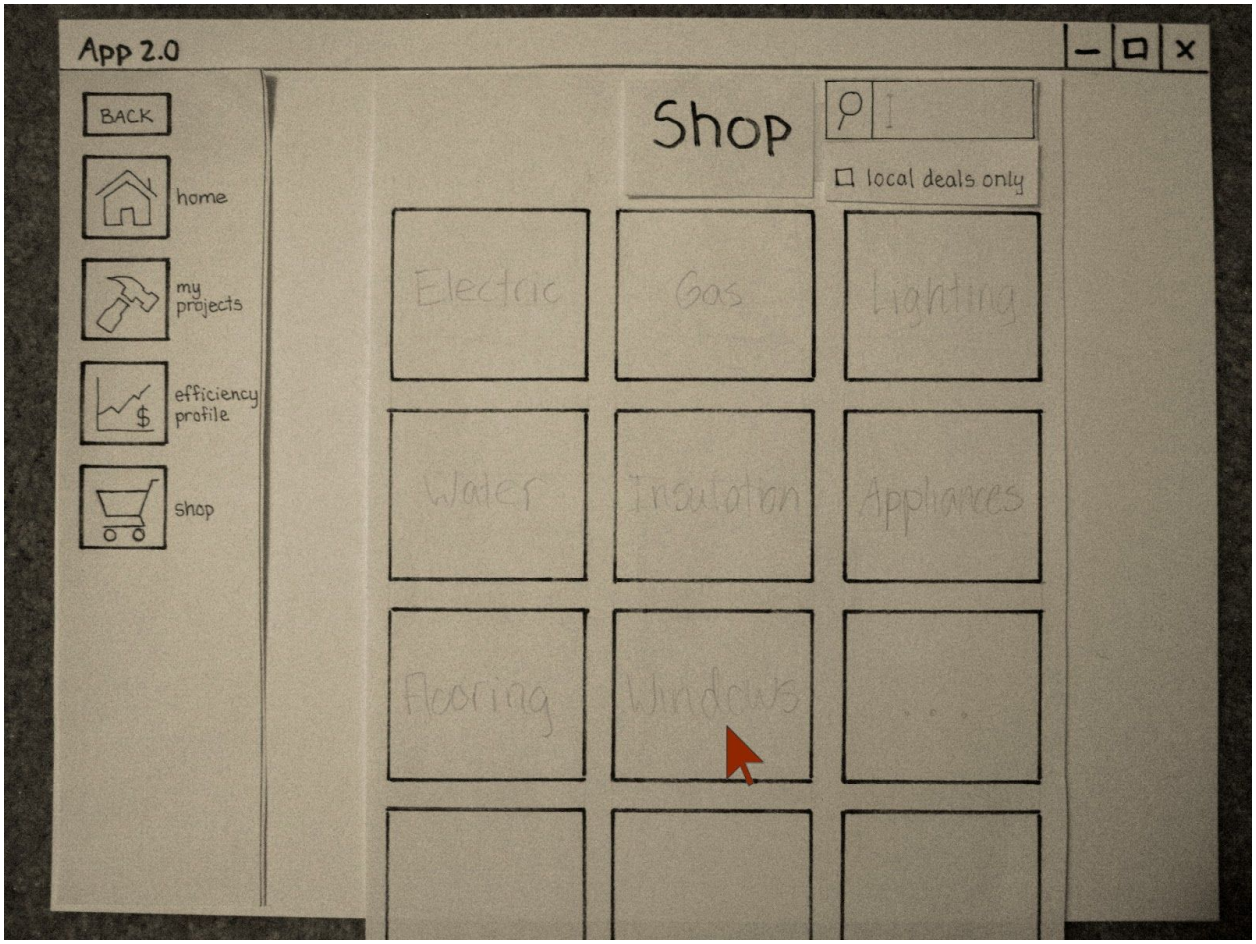

App 2.0
BACK
home
my projects
efficiency profile
$
shop
My Projects
New Project
Existing Projects

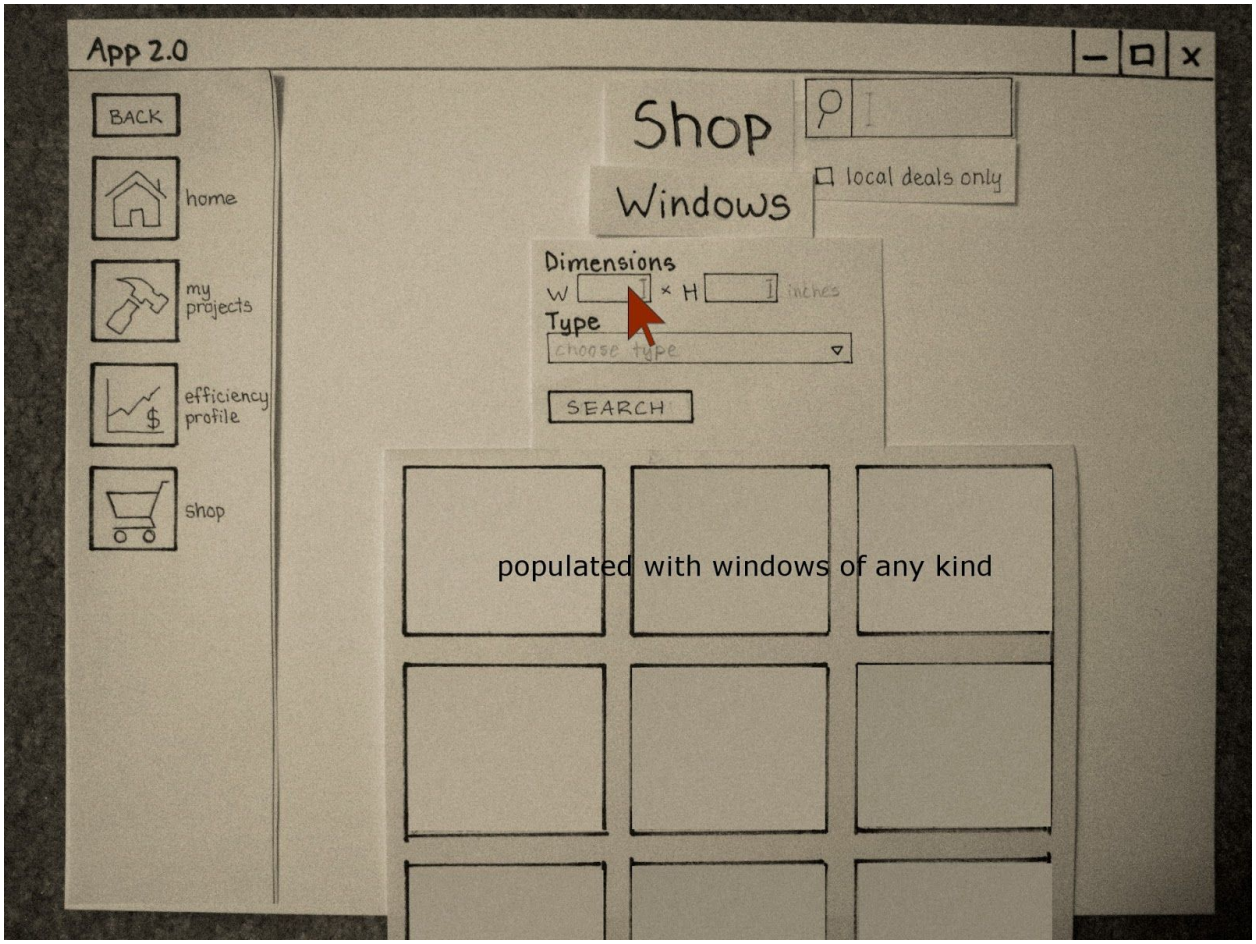

App 2.0
BACK
home
my projects
efficiency profile
shop
New Project
Project
Type
choose type
SAVE
DELETE
Materials
Price Estimate: $
0.00

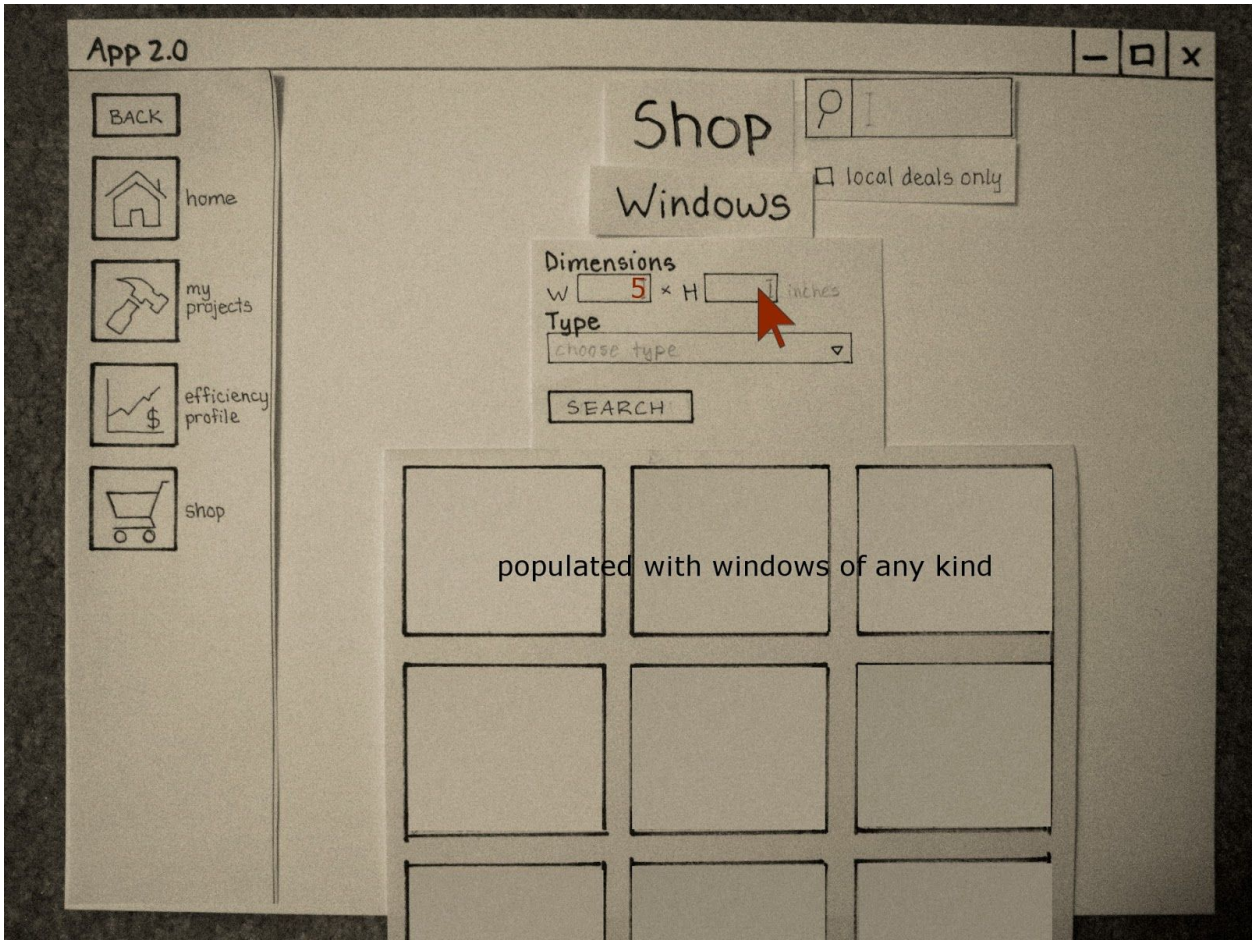

App 2.0
BACK
home
my projects
efficiency profile
shop
New Project
Project
New Windows
Type
choose type
SAVE
DELETE
Materials
Price Estimate: $
0.00

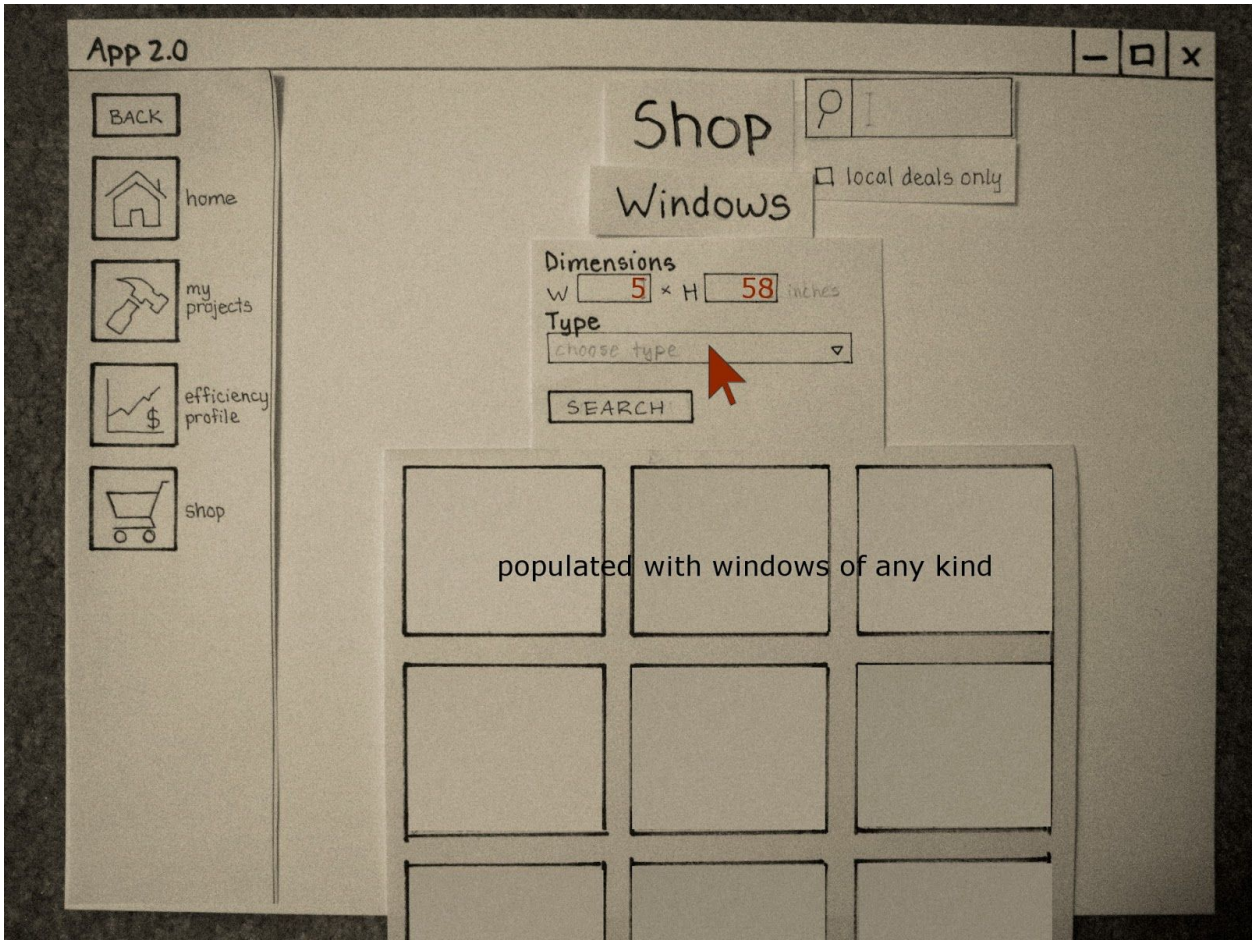

App 2.0
BACK
home
my projects
efficiency profile
shop
New Project
Project
New Windows
Type
Electric
Gas
Lighting
Water
Insulation
Appliances
Flooring
Windows
Custom
SAVE
DELETE
Materials
Price Estimate: $
0.00

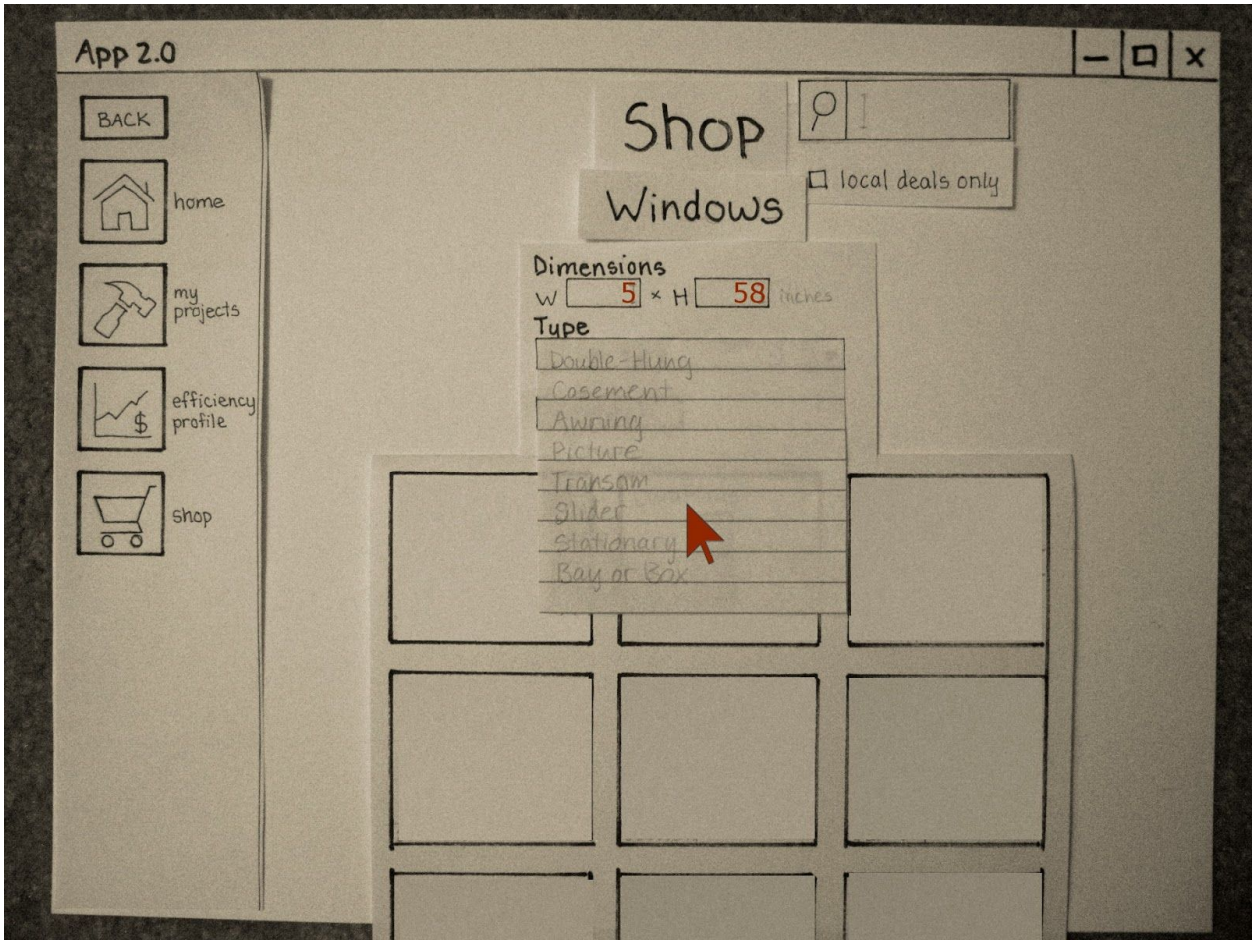

App 2.0
BACK
home
my projects
efficiency profile
shop
New Project
Project
New Windows
Type
Windows
SAVE
DELETE
Materials
Price Estimate: $
0.00

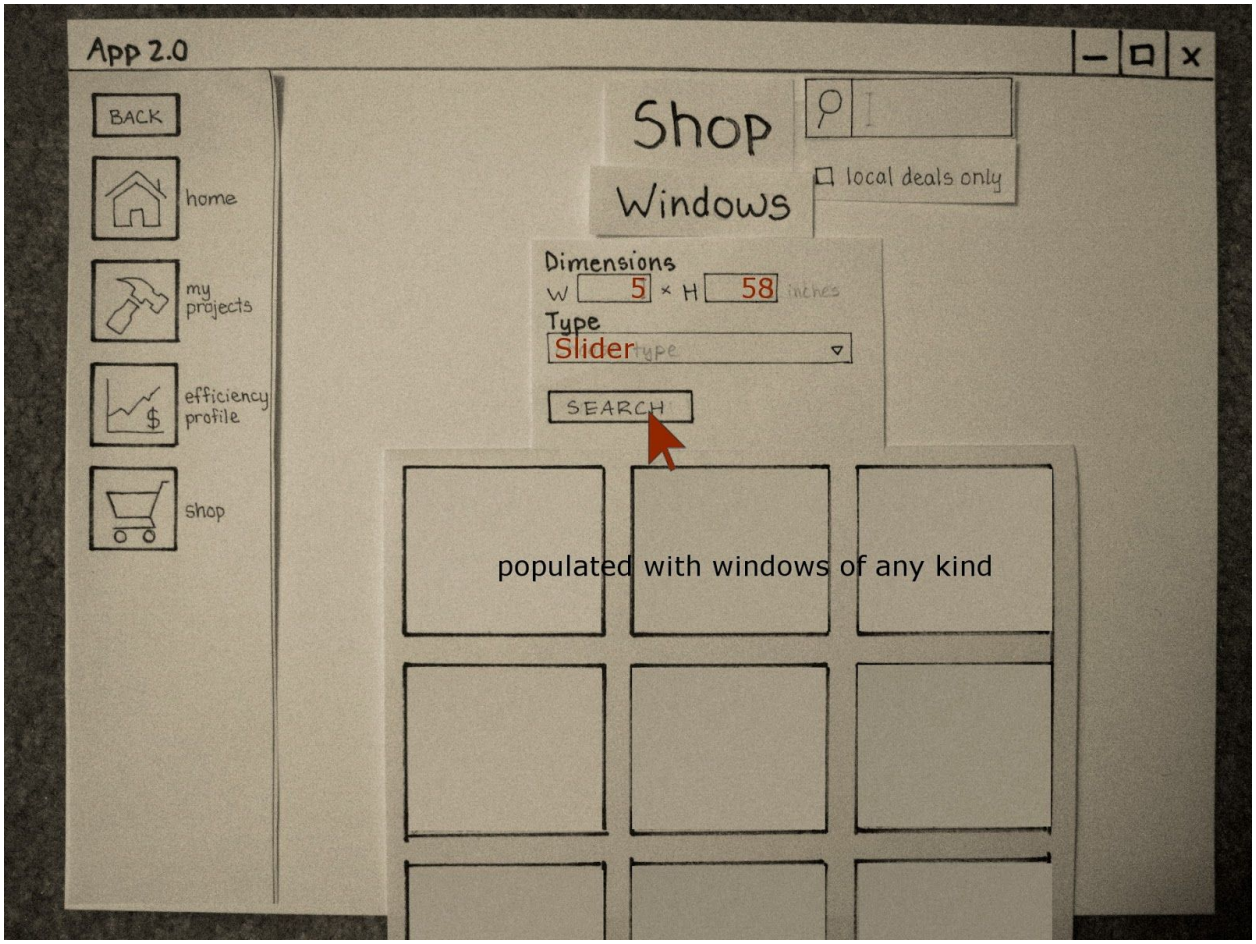

App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
local deals only
Electric
Gas
Lighting
Water
Insulation
Appliances
Flooring
Windows
...

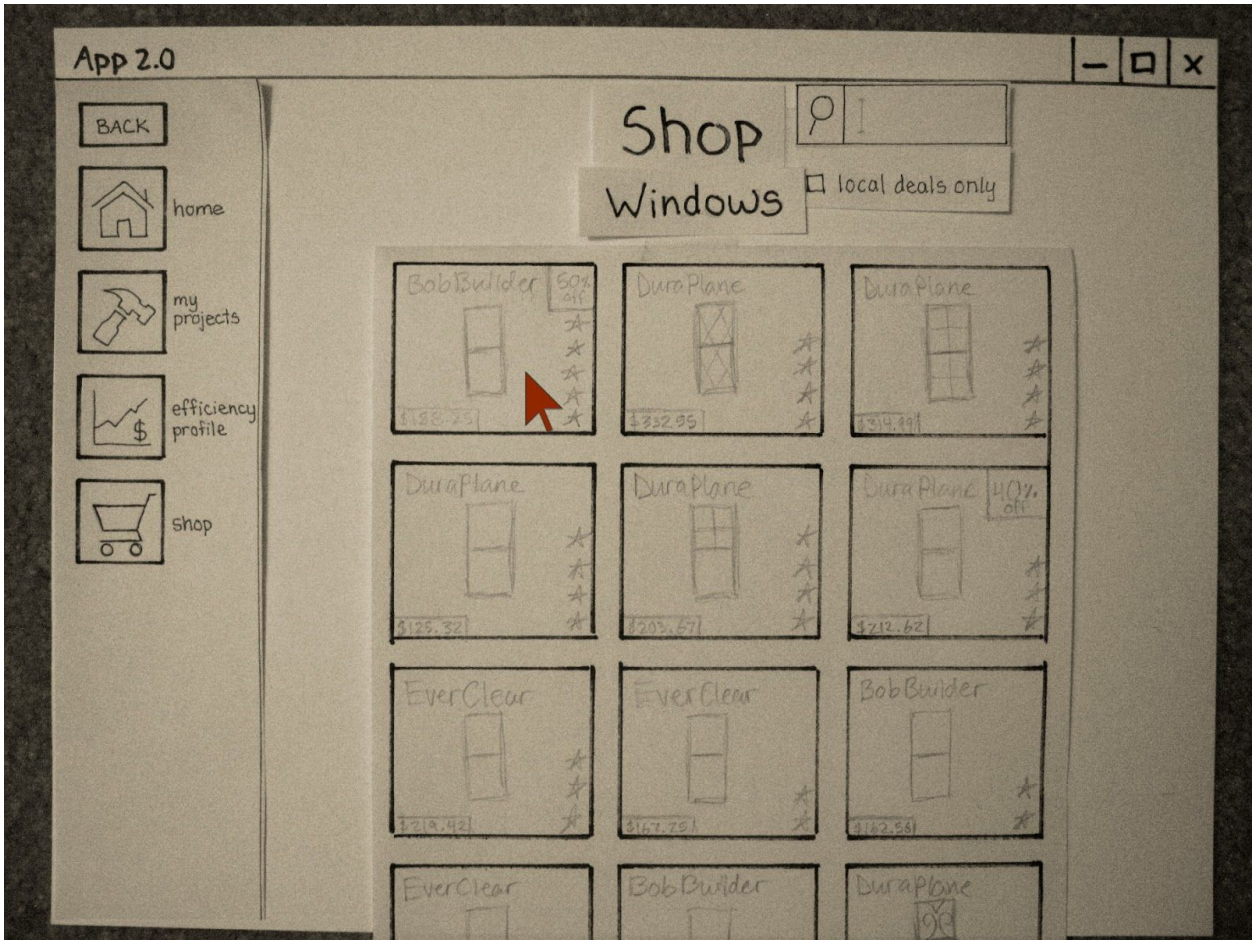

App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
Dimensions
W
× H
inches
Type
choose type
SEARCH
populated with windows of any kind

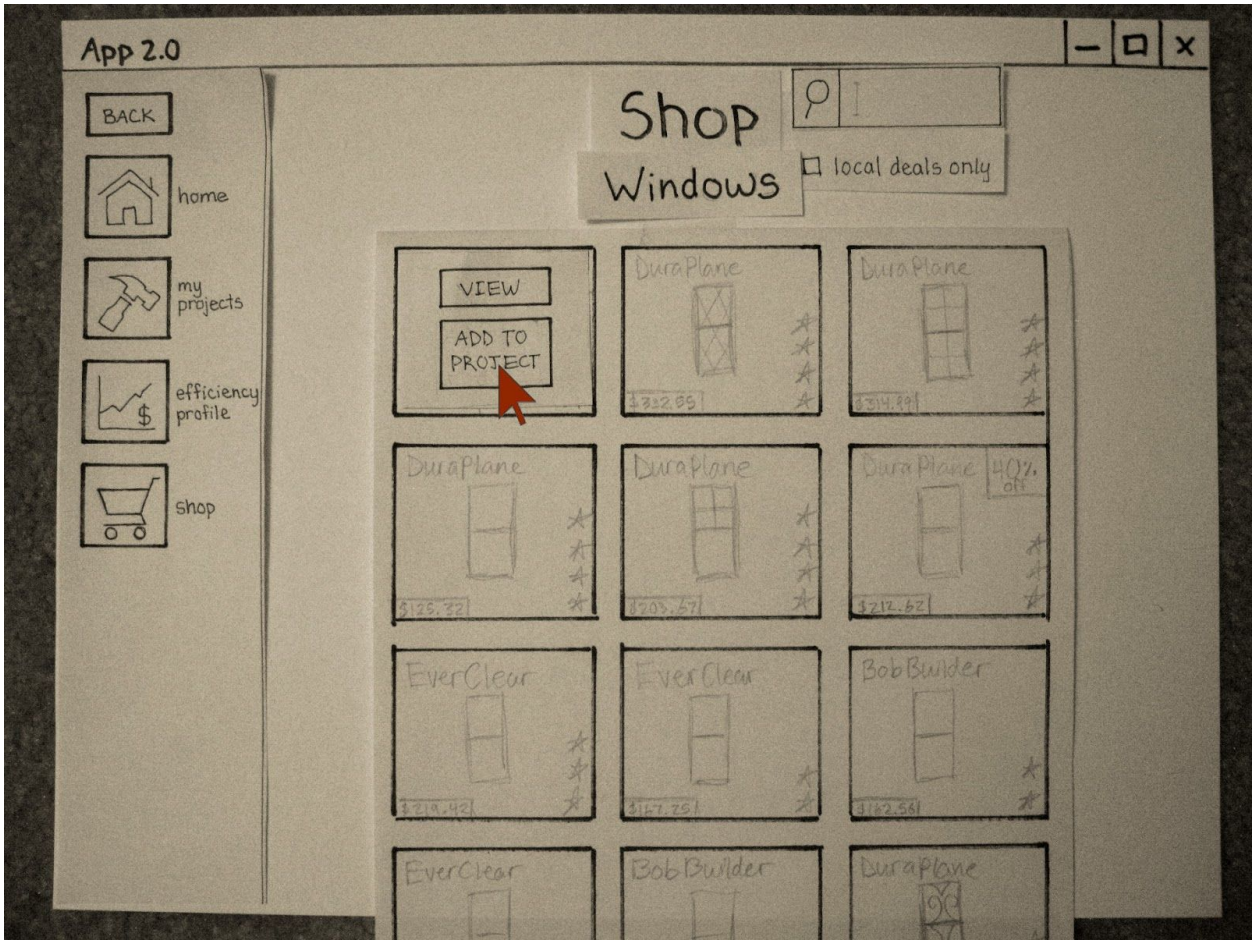

App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
Dimensions
W 5 × H inches
Type
choose type
SEARCH
populated with windows of any kind


App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
Dimensions
W 5 × H 58 inches
Type
choose type
SEARCH
populated with windows of any kind


App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
Dimensions
W 5 × H 58 inches
Type
Double-Hung
Casement
Awning
Picture
Transom
Slider
Stationary
Bay or Box

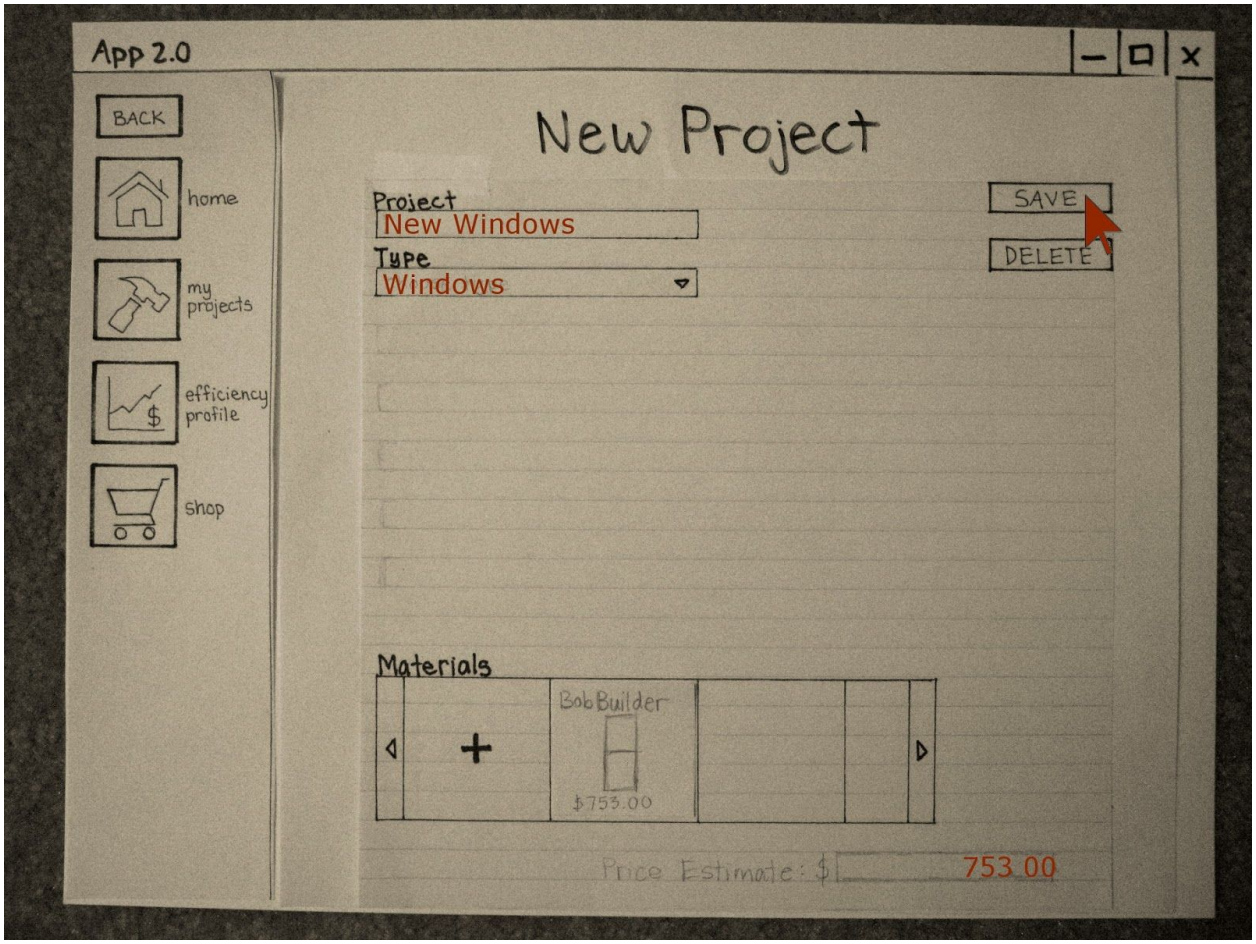

App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
Dimensions
W 5 × H 58 inches
Type
Slider type
SEARCH
populated with windows of any kind

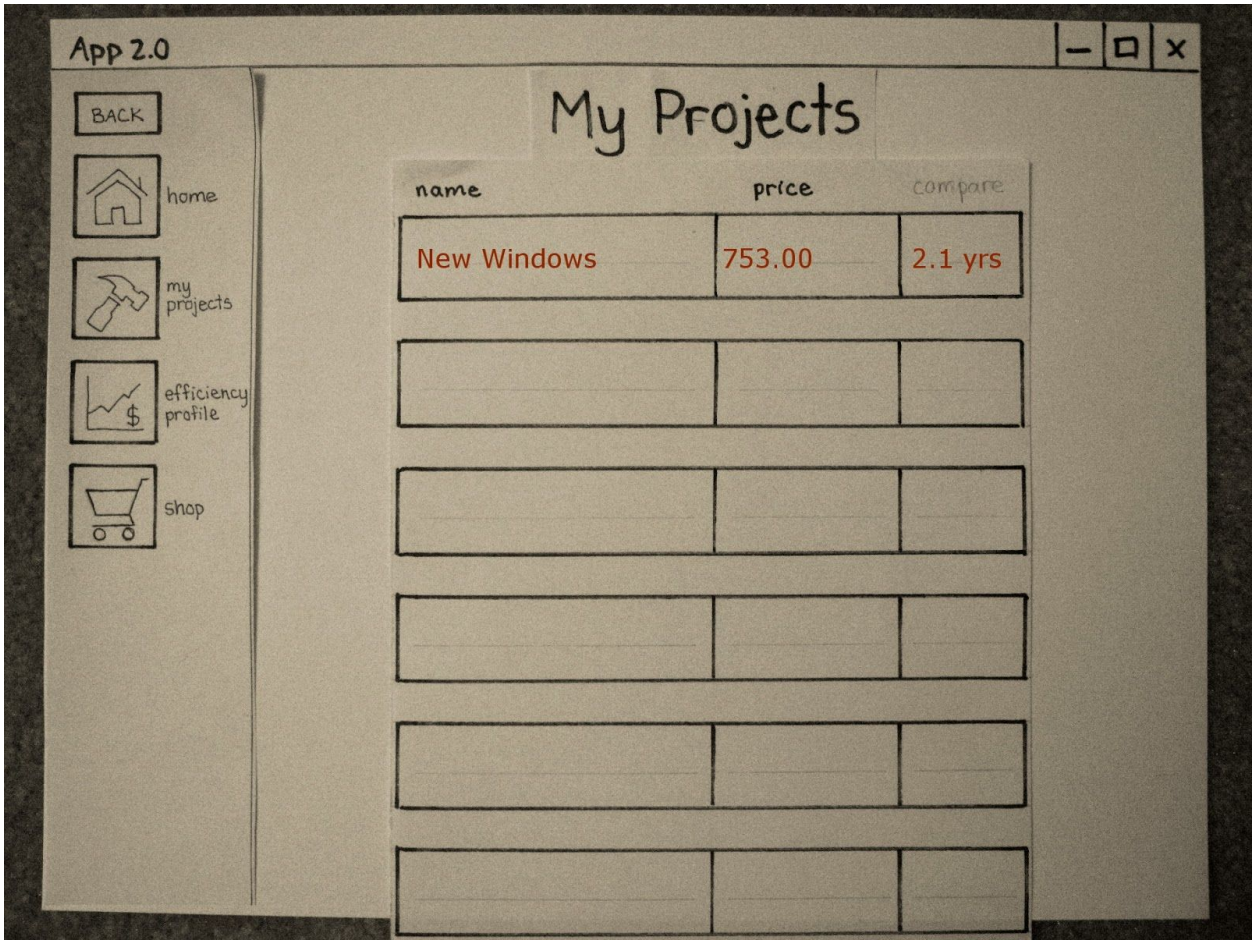

App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
BobBuilder
50% off
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
40% off
EverClear
EverClear
BobBuilder
EverClear
BobBuilder
DuraPlane


App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
VIEW
ADD TO PROJECT
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
40% off
EverClear
EverClear
BobBuilder
EverClear
BobBuilder
DuraPlane


App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
# of items
ADD
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
40% off
EverClear
EverClear
BobBuilder
EverClear
BobBuilder
DuraPlane


App 2.0
BACK
home
my projects
efficiency profile
shop
Shop
Windows
local deals only
# of items
4
ADD
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
DuraPlane
40% off
EverClear
EverClear
BobBuilder
EverClear
BobBuilder
DuraPlane


App 2.0
BACK
home
my projects
efficiency profile
shop
New Project
Project
New Windows
Type
Windows
SAVE
DELETE
Materials
Bob Builder
$753.00
Price Estimate: $
753 00


App 2.0
BACK
home
my projects
efficiency profile
shop
My Projects
name
price
compare
New Windows
753.00
2.1 yrs