RedBeacon Design Challenge

Author: Edwin Li
Interaction Designer
Email: hci@edwinli.com
Phone: 510-371-4285
Website: edwinli.com/ux
LinkedIn: www.linkedin.com/in/edwinli
Last updated: August 28, 2013

CONFIDENTIAL

Contents

Overview 3
The Design Challenge 3
Current System(s) Summary Description and Evaluation 4
Overall 4
Project Screen 4
Process Steps Represented In This Document 4
Artifacts Included in This Document 5
Digesting the Data, and The Beginnings of Design 6
Design 17
Design Directions 17

CONFIDENTIAL

Overview

In pursuing a job opportunity to help RedBeacon take its services and apps beyond the point solution that it is, I am submitting a design in response to the design challenge issued by Michael Curry of RedBeacon. The design proposed to expand the app from a point solution of soliciting service professionals to being a home improvement project notebook, helping users keep track of the things they want to do and things that inspire them.

The Design Challenge

Challenge Requirements

• Cap time to 4-6 hours

• Review on web: http://www.redbeacon.com/my-home

• Download either our android or iphone app to get a baseline for our utility UI

Background story

A new user, unfamiliar with Redbeacon, hears about a new helpful home improvement app and downloads it from the Android or iPhone store. They open the app, go through the welcome tour, and then land on a dashboard page that should be both engaging and delightful.

Goal

Create a new user flow starting from this landing on the dashboard that captures users' home improvement intentions and inspiration.

Keys

• Include a lightweight interaction allowing for rapid-fire project entry

• Project entry can include custom entries or a selection from recommendations

• Offer (not require) an option to request a service

Deliverables

• Short presentation or write up of your process

• Lo-fi sketches or wireframes

• Interactive prototype built with method of your choosing

CONFIDENTIAL

Current System(s) Summary Description and Evaluation

The current app seems a very focused application. Users are given the opportunity to describe a project, prompted to provide certain information, then provided with a submit button to submit the project as a request.

Overall

Impression: The app feels very ballistic. Once you start, you can't stop, and once you get to the end, the only option you have is to submit the project to RedBeacon and request service professionals. Filling out the app's information prompts could take less than five minutes…but how often are users five minutes away from a decision to hire a professional?

This is the reason that the app feels like a point solution. The app only serves the function of collecting required information and sending it out. Users' home improvement lifecycles involve a lot more than that, including lots of procrastination, considering doing it themselves, considering hiring professionals, collecting ideas by, for instance, browsing through a Home Depot.

To grow usefully beyond that point solution, I believe that the app will need to support more of these other activities and timescales.

Project Screen

Users fill out the necessary information by following a guided interview about their projects, once it has has been identified as a particular type of project. These questions and answers build a project screen with each question as a section. There is an unlabeled status bar at the bottom reporting the progress of the user through the project definition process.

The problems here are:

1. Users don't know that bar on the bottom is a progress bar.
2. Users don't know that all their answers info is on one long "page".
3. Users don't know what information they'll need.
4. Users don't know how to edit prior answers until they get to the bottom and click the X button to close or cancel the project.

Process Steps Represented In This Document

This document represents a snapshot of the state of the described RedBeacon design challenge in terms of the process outlined above and how it got there.

1. **User research.** While self-observation and introspection can often be suspect as a source of research, as focused design challenge, I could only go on the information in the challenge and what I felt was likely true of the apps' users. I was careful to note my own reactions to the app. In addition, observations with regard to social networking phenomena such as Pinterest point to people's tendency to keep track of things as ideas, suggesting that people may collect ideas and

CONFIDENTIAL

solutions as they wander the world and maybe a Home Depot with their smartphones and other smart devices.

2. **Market research.** Knowing from my phone conversation with Michael Curry that one of the directions that RedBeacon is considering is growing their service and app beyond being a point solution.
3. **Digesting the Data.** I used the last two steps' worth of input to create a set of Essential Use Cases to catalog the set of functionality that I felt a new user would be interested in and to understand their relationship with each other. In doing this, I went beyond what the app currently does to try to address how the app could support more of the lifecycle of activity around users' home improvement project needs. **Artifacts:** Essential use cases, content model, navigation model
4. **Design.** Where the rubber meets the road. **Artifacts:** content models, navigation models, sketches, Balsamiq mockups.

Artifacts Included in This Document

- Essential use cases
- Content model sketches
- Navigation Model sketches
- Design sketches of key screens: home and project detail

Separately, please find "RedBeacon Home Improvement app v0 clickable prototype.pdf", a clickable pdf exported from Balsamiq Mockups.

CONFIDENTIAL

Digesting the Data, and The Beginnings of Design

Artifacts in this section: Essential Use Cases

CONFIDENTIAL

Essential Use Cases: RedBeacon App

Sunday, August 25, 2013
5:56 PM

UX Guidelines

- Submitting a request is not the sole goal of the app
- In support of the vision to grow the RedBeacon service beyond a point solution, I suggest a re-imagining of the app and service to be a Home Improvement Project "notepad", where users can take notes on home improvement projects that they want to do or have done, immediately or in the future, fully formed ideas/projects in their head or otherwise.
    - The idea here is that with a list of such projects maintained, it will lower users' resistance or activation energy required to hit that "Submit Request" button.
    - Users can record partial projects or whole projects and review them at their leisure without the pressure to submit it.
    - This means essentially building an app that serves as a To Do list for home improvement projects with the built-in function of "sending it off to professionals" to get it done.
    - They can also collect pictures of solutions that they like along the way rather than needing to have them right then.
- Allow users to do as much as possible before requiring them to commit. Also, sell the benefits at the point of commitment (i.e., how they benefit from creating an account or logging in or what happens when they submit a request):
    - Creating an account
    - Logging in
    - Submitting a request

Name: "Essential Use Case Template (Quick)"

ID: EUC-
Preconditions:

-

Postconditions:

-

User Intention	System Responsibility

.

Name: "First Use"

ID: EUC-001
Preconditions:

- User has installed the app, and is opening it for the first time.
- User has gone through the intro material
- User is now on the "Home" screen of the application

Postconditions:

- One Home Improvement Project has been entered, at least minimally (say, at least one name or one picture)

User Intention	System Responsibility
Record a home improvement to do item • ID: EUC-Ext-001: Attach a photo or video • EUC-Ext-002: Enter home improvement to do parameters	• Categorize the to do item into pre-existing categories • Indicate available input methods • Collect minimum required amount of data • Collect optional data • Indicate available next steps
In the course of task performance: • Finish the to do item entry • Interrupt item entry with another activity or distraction ○ Postpone this task--just leave it where it is. ○ Start a new task ○ ~~Leave the app~~ ○ ~~Leave app in foreground and let screen go to sleep~~ ○ ~~Leave app in foreground and put screen to sleep~~ • Explicitly decide to leave the task "for now"/Explicitly choose to finish it later • Decide the app is not for them and abandons the app entirely	Maintain state of user data. Save for the resumption of activity later.

Name: "Attach a Photo or Video"

ID: EUC-Ext-001
Preconditions:

- User is entering a home improvement project in the app

Postconditions:

- User has attached a photo or video to the home improvement project and has the option to add more photos or videos or to continue with entry of the home improvement project

User Intention	System Responsibility
User wants to attach a photo or video to a home improvement project	Offer the choice of attaching an existing photo or video or attaching a new one. • ID: EUC-Ext-002: Attach an Existing Photo or Video • ID: EUC-Ext-003: Take a new photo or video and attach it to the project
User wants to: • Add another photo or video --> Repeat last step • Enter other Home Improvement project data • Start a new project • Leave the app	

Name: "Attach an Existing Photo or Video"

ID: EUC-Ext-002
Preconditions:

- User is entering a home improvement project in the app
- User has indicated that they would like to attach a photo or video to the project
- ID: EUC-Ext-001: System has offered users the choice to attach an existing or new photo or video

Postconditions:

- An existing photo or video is attached to the home improvement project
- Users may add more photos or videos
- Users may continue to with the entry of the home improvement project

User Intention	System Responsibility
User wants to attach an existing photo or video	Present users a list of all the existing photos or videos available on the device.
User selects photo(s) or video(s) to attach	Attaches photo or video to a home improvement project
	Present users the choice : • Change their selection of photos and videos to attach • Attach these photos and videos

Name: "Take a new photo or video and attach it to the project"

ID: EUC-Ext-003
Preconditions:

- User is entering a home improvement project in the app
- User has indicated that they would like to attach a photo or video to the project
- User has indicated that they would like to attach a new photo or video to the project

Postconditions:

- A new project or video is attached to the home improvement project
- Users may add more photos or videos
- Users may continue with the entry of the home improvement project

User Intention	System Responsibility
User wants to take a new photo or video for a home improvement project that may or may not exist	Offer the camera interface
Users take the photo or video	1. Let users review the photo or video. 2. Let users confirm that they like it. 3. Let users choose to take another photo or video or go on to another activity.
Confirm that they want that photo	Offer users the chance to attach the photo to existing home improvement projects or a new one.

Name: "Enter Home Improvement Project (text, etc.)"

ID: EUC-Ext-004
Preconditions:

- User has indicated the desire to enter information for a home improvement project. The information may not be complete.

Postconditions:

- A home improvement project has been added to the app.

User Intention	System Responsibility

User wants to record some information about a home improvement project.	• System offers way to start, probably not indicating the full spectrum of what might be required. • System offers sample projects to inspire users and give them potential jumpstarts
User enters first information that comes to mind.	1. Parse that information into a description or a name or both. 2. Categorize into RedBeacon categories if possible 3. Offer users the chance to confirm that categorization 4. Offer users to continue adding more information for that project, showing users what other information the system will need and can optionally take 5. Offer users the option to simply add another home improvement project, thus supporting a brainstorming mode --> Users repeating this step
Enter information needed by the system flexibly, i.e., in whatever order users think about it, in whatever subset they know, or in whatever order the app suggests.	Show users at all times the state of their home improvement project entry. What information is required, what information is entered, what information is optional, what information is still missing, and how far they are from being "finished". • "Submitting a request" is the not the sole result of a successfully recorded home project entry.

Name: "Resume Home Improvement Project Entry"

ID: EUC-002
Preconditions:

- A partially completed project has been entered. May or may not have been the last thing on the application screen when users disctontinued their task performance, whether by actually leaving the app,

Postconditions:

-

User Intention	System Responsibility
Continue data entry for an incomplete home	ID: EUC-Ext-008: Browse Existing Projects

improvement project	
Select a home improvement project to continue	Present to users the information they've entered, the information they still need to enter, and any optional information that they my or may not have entered. ==> an Interaction context, "Project Detail Page"

Name: "Browse Existing Projects"

ID: EUC-Ext-008
Preconditions:

- None

Postconditions:

-

User Intention	System Responsibility
User shows the intention to browse and/or select from existing projects	Present users with a list of existing home improvement projects with ways to differentiate and identify them: • Name? • Date first entered/started? • Date last modified? • % complete? • Categories? Like room of the house? • Maybe indicate what information is missing yet? • Show whether any have been submitted to pros. ○ If so, show the status of the project. ==> May implicate an Existing Projects page, or at least a pane

Name: "Create an Account"

ID: EUC-003
Preconditions:

- User has the app installed
- User does not have a Redbeacon account

Postconditions:

- User has a RedBeacon account
- User is logged in?

User Intention	System Responsibility

Name: "Login"

ID: EUC-004
Preconditions:

- User has an existing RedBeacon web account
- User has not tied their app to their RedBeacon web account

Postconditions:

- User has tied their app to their RedBeacon web account

User Intention	System Responsibility
User wants to associate their app with their RedBeacon account	Challenge user for authentication information
User provides the information necessary	Authenticate user: • Succeed --> Bring down their web account info and send up their app info • Fail --> EUC-Ext-xxxx: Offer users the chance to try again, try a different way, or a way to verify their identity and successfully authenticate to the system.
	Display users' main app view

Name: "Submit Request"

ID: EUC-Ext-005
Preconditions:

- User has a home improvement project that they want to submit to pros

Postconditions:

- User has submitted a home improvement project as a request for bidding.

User Intention	System Responsibility
User indicates that they want to submit their home improvement project for pro help/estimating	System verifies that the information is complete enough. • If required or optional information is missing, communicate that to users and offer them the chance to provide the rest of the information --> Related to ID: EUC-002: Resume Home Improvement Project Entry • If the information is complete, let uses know that. ○ Provide a quick overview of the what the next steps will look like. ○ Give users the opportunity to affirm their choice or change their mind.
User confirms their intention	System submits request

Name: "Attach a Photo or Video to a New Home Improvement Project"

ID: EUC-Ext-006
Preconditions:

- Users have selected photo(s) or video(s) in the app
- Users have selected to attach the selected items to a new home improvement project

Postconditions:

- Attached selected photo(s) and video(s) to a new home improvement project

User Intention	System Responsibility
	Ask users for minimum home improvement project info, offering the option for them to drill down into entering fuller information. • BR: At a guess, minimally a name.

User enters a name for the new home improvement project	System records it and confirms
User may choose to enter in more complete information about the project. • ID: EUC-002: Resume Home Improvement Project Entry	

Name: "Save New Video or Photo, but not to a project"

ID: EUC-Ext-007
Preconditions:

-

Postconditions:

- Photo or video saved to Camera Roll of the device?

Notes:

- May be scope creep. Consider this usage is essentially using the device's camera, and may thus be considered outside the scope of this app...

User Intention	System Responsibility

Name: "Add Home Depot Product to a Project"

ID: EUC-Ext-008
Preconditions:

-

Postconditions:

- Product attached to a project

Notes:

- Towards an integration with users' presence in a Home Depot

User Intention	System Responsibility

Name: "Add Product via Bar Code Scan"

ID: EUC-Ext-009
Preconditions:

-

Postconditions:

-

User Intention	System Responsibility

Name: "Add Product via Home Depot catalog search"

ID: EUC-Ext-010
Preconditions:

-

Postconditions:

-

User Intention	System Responsibility

Design

Artifacts in this section: content model sketches, navigation model sketches, and screen sketches.

Design Directions

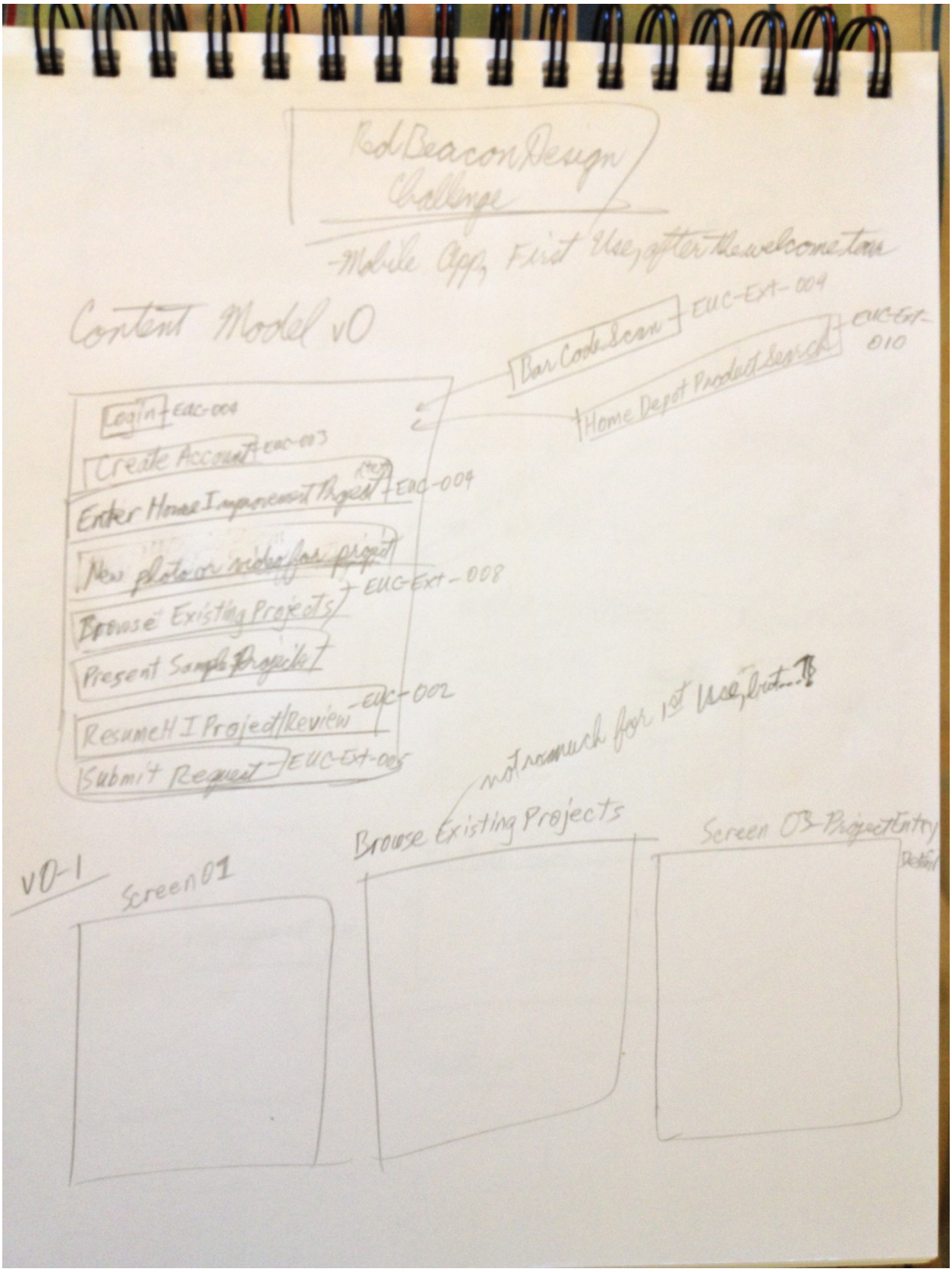
To move beyond a point solution, an app will have to grow to support more of the activities that users do in their home improvement processes. Of particular concern with respect to the app are these areas of “growth”:

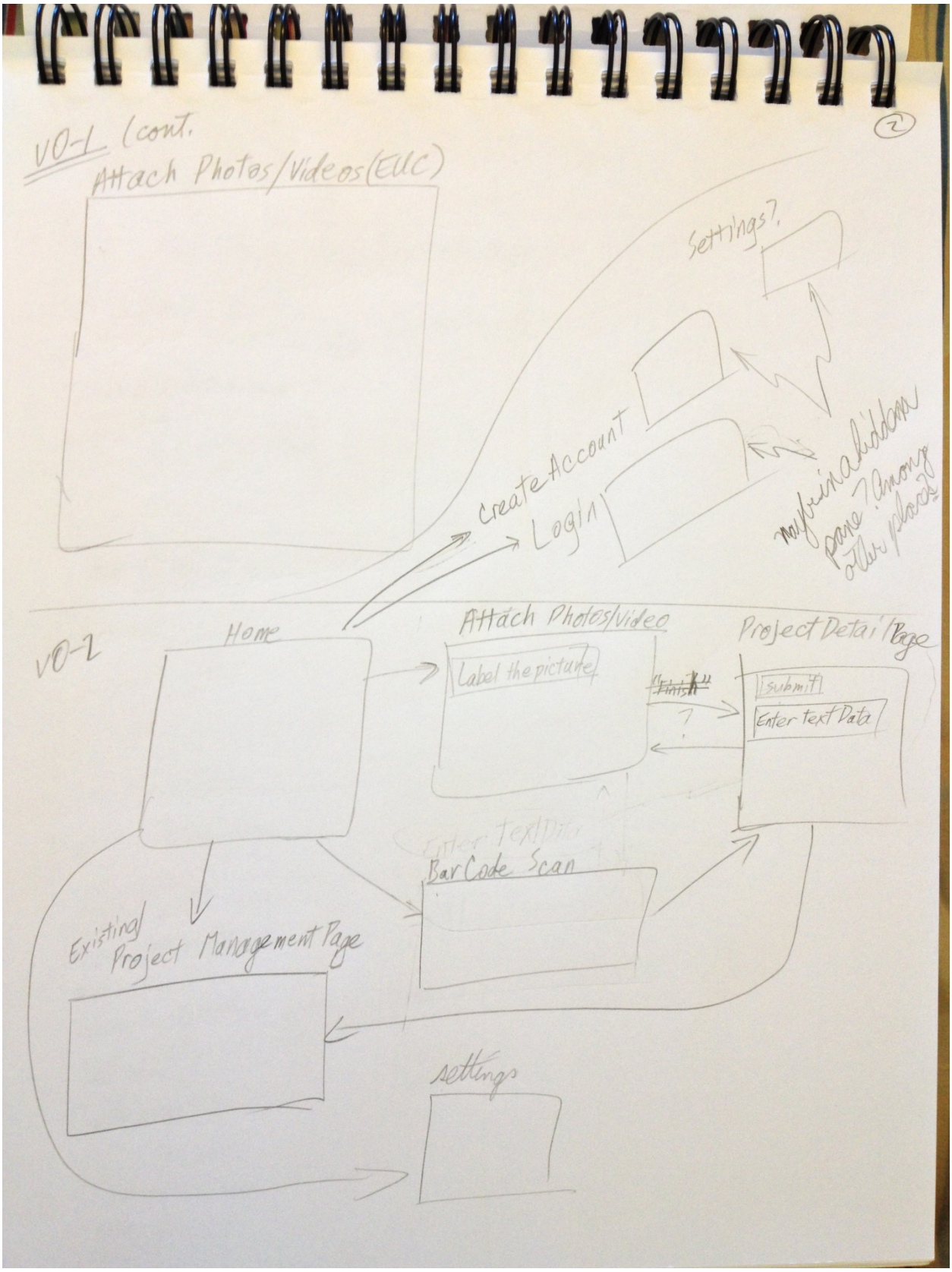
- Users are rarely within a five minute form-filling adventure away from calling in a professional. The process of defining a home improvement process and deciding to undertake it probably happens over a much longer timescale. At the least, the app should be flexible enough to support many timescales.
    - Therefore, submitting a request should not the sole goal of the app. The app should explicitly support saving projects, allowing users to have many projects in various stages of readiness and allowing them go back to them and add to them at any point.
- In support of the vision to grow the RedBeacon service beyond a point solution, I suggest a re-imagining of the app and service to be a Home Improvement Project "notepad", where users can take notes on home improvement projects that they want to do or have done, immediately or in the future, fully formed ideas/projects in their head or otherwise.
    - The idea here is that with a list of such projects maintained, it will lower users' resistance or activation energy required to hit that "Submit Request" button.
    - Users can record partial projects or whole projects and review them at their leisure without the pressure to submit it.
    - This means essentially building an app that serves as a To Do list for home improvement projects with the built-in function of "sending it off to professionals" to get it done.
    - An idea for a project can be inspired by thoughts, something users see, or products they run across. Offer users as many ways to start a project definition as is feasible. Let them start with a photo, video, product via bar code scan, or for later integration, a search through a Home Depot Catalog.
- The Project Detail page should communicate to users what they have done, what they need to do, and how they can edit the information. Presenting it more at-a-glance is the goal.
- “Soft-engagement": Let users use as much of the functionality and explore the app as much as possible without requiring them to create an account. This allows them to come to discover, appreciate the value of your app, allowing them to build their own incentive to sign up for your service. The corollary is that there needs to be a value to that account beyond allowing them to get marketing emails from you. Also, sell the benefits at the point of commitment (i.e., how they benefit from creating an account or logging in or what happens when they submit a request):
    - Creating an account
    - Logging in
    - Submitting a request

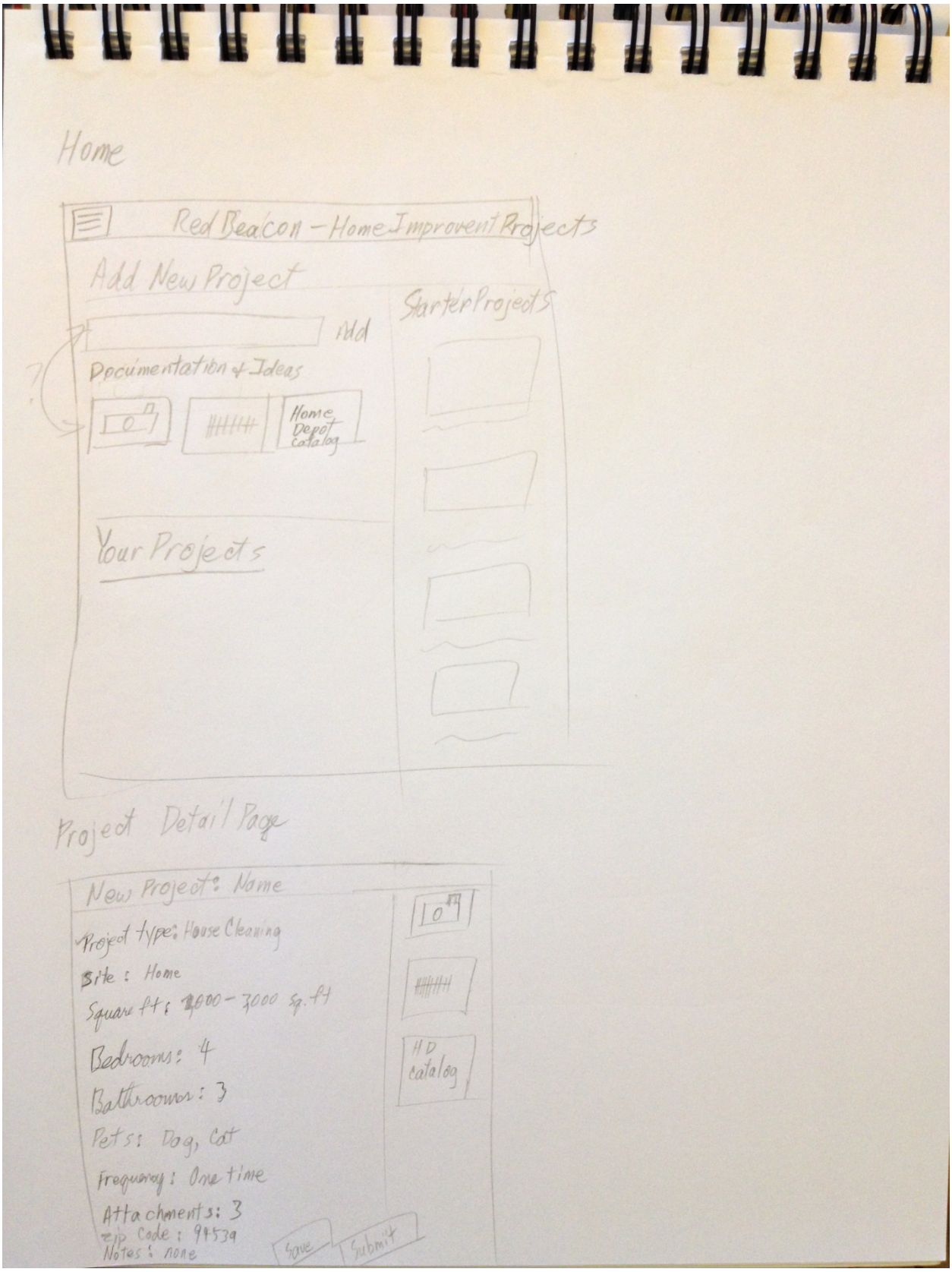
CONFIDENTIAL

- Support partial task completion. Especially as this is a mobile app, interruptions and distractions are the norm rather than the exception. This support should be clear to users.
    - Users' data will never be at risk--as far as we are able to support that--whether they have created an account or logged in yet or not. At the least, it will be saved to their phone.
        - Branch thought: What about integration with other, complementary services? Storage to or importing pictures or videos or whatever from Dropbox, Evernote, Google Drive, MS Skydrive, etc.?

CONFIDENTIAL


RedBeacon Design Challenge
-Mobile App, First Use, after the welcome tour
Content Model v0
Bar Code Scan
EUC-EXT-004
Home Depot Product Search
EUC-EXT-010
Login EUC-004
Create Account EUC-003
Enter House Improvement Project EUC-004
New photo or video for project
Browse Existing Projects EUC-EXT-008
Present Sample Projects
Resume/Project/Review EUC-002
Submit Request EUC-EXT-005
not so much for 1st use, but...
Browse Existing Projects
Screen 03 Project Entry
v0-1
Screen 01


V0-1 (cont.
Attach Photos/Videos (EUC)
Settings?
Create Account
Login
V0-2
Home
Attach Photos/Video
Label the picture
"Finish"
Project Detail Page
Submit
Enter text Data
Bar Code Scan
Existing Project Management Page
settings


Home
RedBeacon – Home Improvent Projects
Add New Project
Add
Documentation & Ideas
Home Depot catalog
Your Projects
Starter Projects
Project Detail Page
New Project: Name
Project type: House Cleaning
Site: Home
Square ft: 2000 – 3000 sq. ft
Bedrooms: 4
Bathrooms: 3
Pets: Dog, Cat
Frequency: One time
Attachments: 3
zip Code: 94539
Notes: none
HD catalog
Save
Submit