Marie Bautista
Kamlesh Jain
Brian Oppenlander
Austin Toombs

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I543 Project 5: Affinity Diagram Report

Summary of major insights from affinity diagram

I. Why keep things?
   a. Not wasteful – keeping things just in case it can become useful at some point
   b. Like to give back – keep things that might be useful to someone else
      i. e.g. give back to the church
      ii. e.g. to give to other roommates or friends
   c. Symbolism – the item might have some sort of symbolism to the person
      i. e.g. Spiritual symbolism
      ii. e.g. Sentimental value
   d. Organization – keep things to store other things in
      i. e.g. keeping the box a laptop came in because it can be used to hold other items
      ii. e.g. keeping shoeboxes to store paperwork
   e. Efficiency – some items in the home are kept for efficiency purposes.
      i. e.g. aluminum foil on stove to ease cleaning
      ii. e.g. luggage to help sorting clothes

II. Thrifty – some items in the home are acquired because they were on sale (bargains). They may or may not become useful at some point.

III. Family history can influence the way we collect things now

IV. Placement of items can signify the presence or lack of trust
   a. If they are hidden, the person might be afraid the roommates might use or misuse the item
   b. If the item is in a common area, the person is okay with the item being "communal"

Models

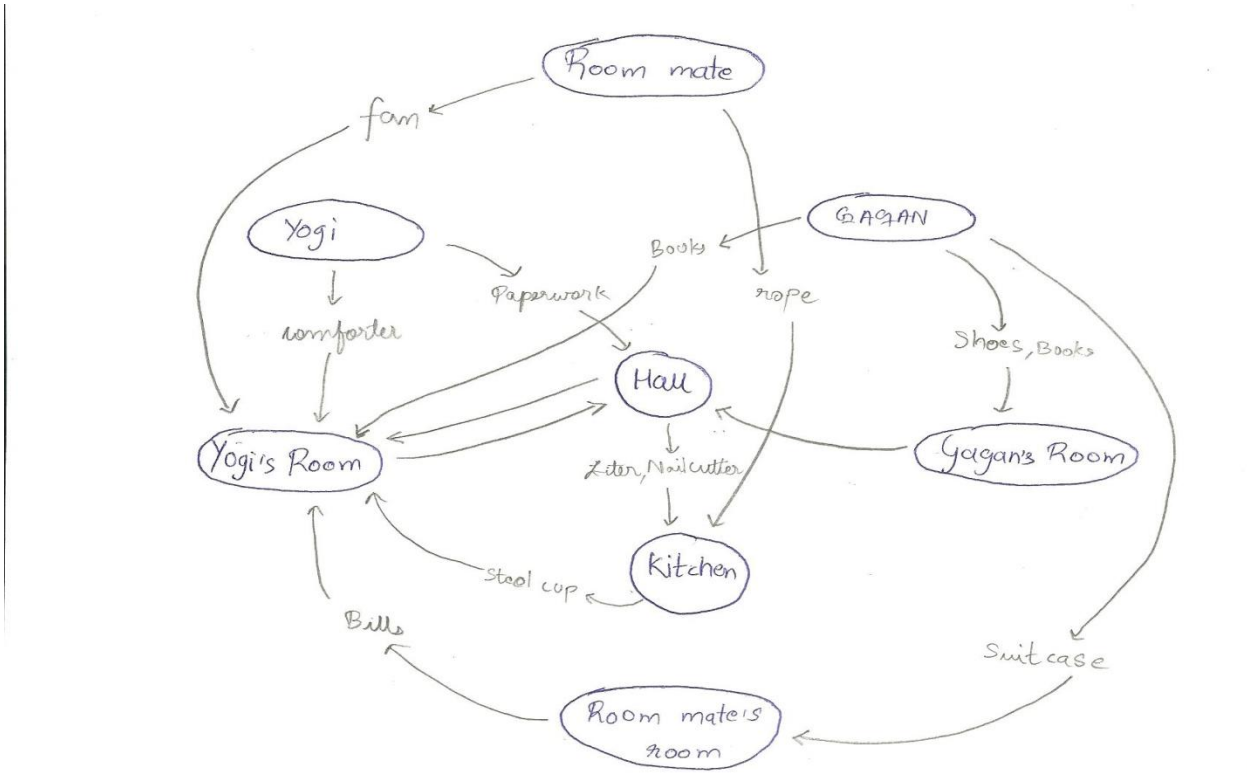
Flow

Coordination:

- The flow (movement) of artifacts from one person to the next:
  Both our test subjects were international students having a lot of clutter. We found clutter in UserY's room that belonged to his roommates and vice versa. For instance, there was a bunch of books that belonged to UserG was kept in UserY's room. Also his roommates fan was lying on the floor of UserY's room. UserG kept his unused items in his roommate's room.

- Flow of the artifacts from one place to another:
  A lot of clutter was made due to the hoarding of unused items. A lot of items were intentionally and unintentionally relocated. For instance, UserY cluttered a lot of paper bills and receipts in his room from hall. The liter, rope and nail cutter were found in the kitchen drawer that belonged to the hall drawer. The steel cup from the kitchen was in UserY's wardrobe. UserG kept his books in the hall that were in the kitchen.

  Depending on the flow of the artifacts from person to person and from place to place the flowing in the Flow Model:



Sequence

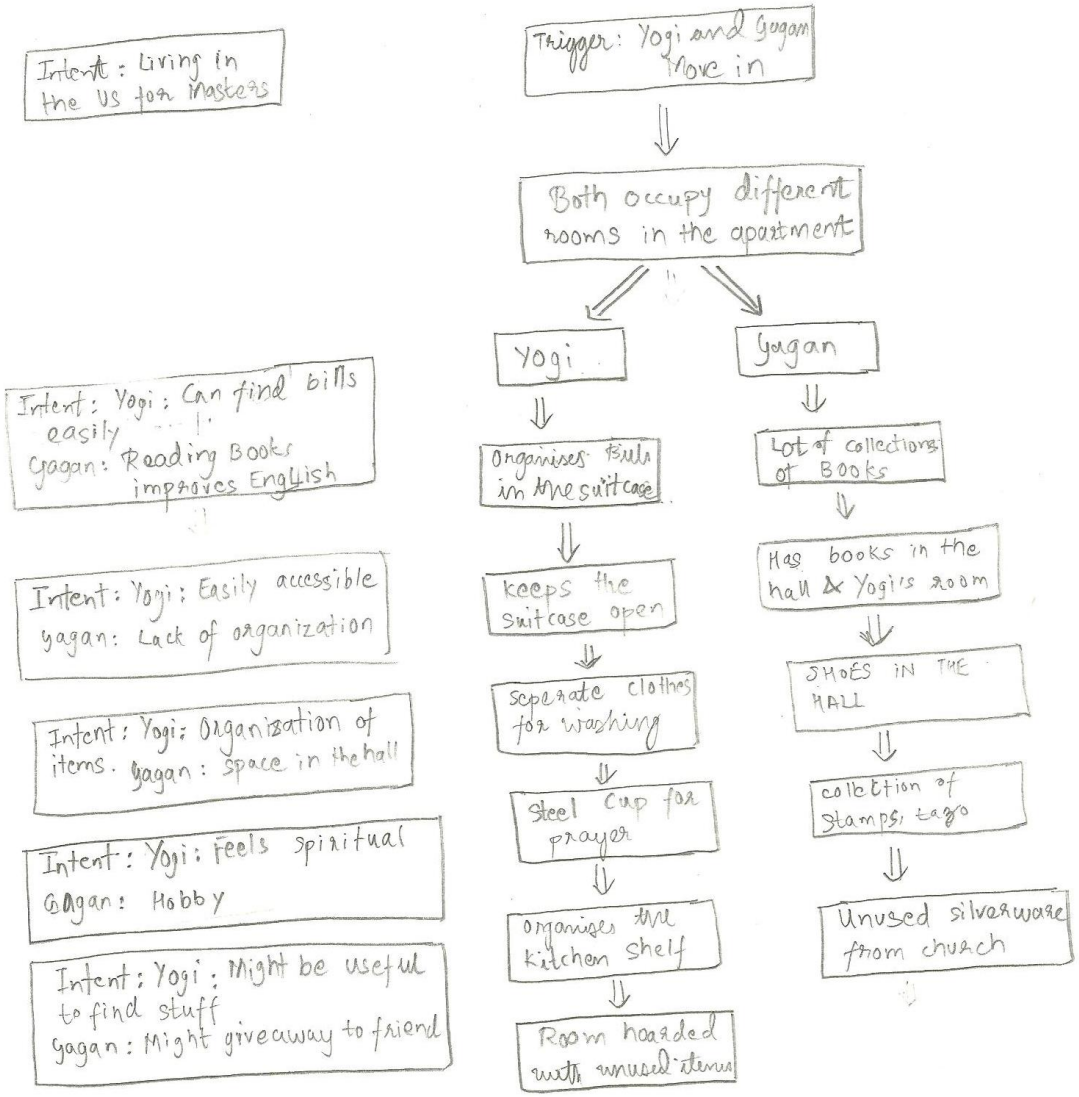
Trigger point: The trigger point for the sequence of actions can be the move in of both the test subjects in the apartment.

Intents:

The sequence of actions is marked by the intentions of the user. The reasons for hoarding and cluttering can be sentimental value, cultural value, economic value or lack of organization. Both UserG and UserY showed a lot of economic value for objects even if they were unused and hoarded.

Conjecture:

Based on the intents and observation of the study the conjecture was that both the subjects valued artifacts. Also UserG showed signs of sentiments for the shoes that he purchased for his father. UserY showed good organizational skills by segregating dirty clothes from cleaned ones and organizing his paperwork in different sections of the suitcase. UserG hoarded a lot of artifacts just because they were free and he had a lot of space. Deriving from this intents and conjectures the Sequence Model can be shown as:



Artifact

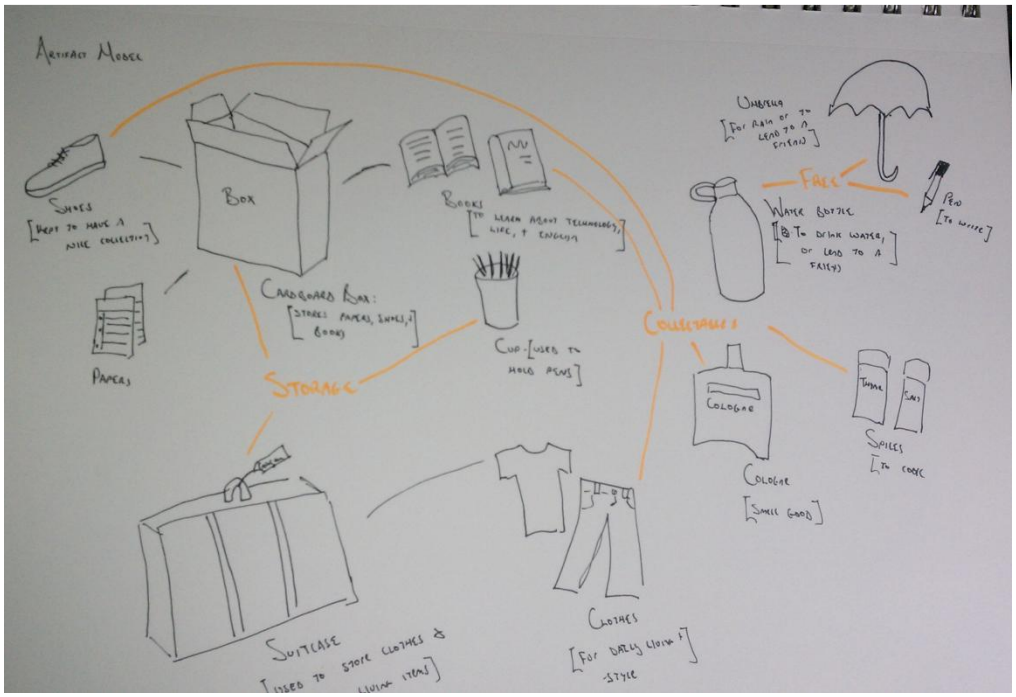
In the terms of clutter, our two test subjects use artifacts in the following categories: storage, paperwork, free items, and collectables.

Storage: Our subjects actually hoard items in order to organize some of their clutter. These artifacts include cardboard boxes and cups. These two artifacts are used to hold papers, shoes, books and pens. To store clothing, both subjects used suitcases because they are always on the go. As a general container for larger items such as shoes, tennis rackets, and suitcases, the two subjects use closets.

Paperwork: Paperwork artifacts include bills, receipts, transcripts, international documents, and AI papers. The purpose for keeping these items was to have just in case they needed to reference something (for example, expenses or student's grades).

Free items: Each of our subjects had several items of clutter that they received for free. These items were received from career fairs, friends, or the church. Some of these items include water bottles, umbrellas, pens, and documents. When asked why these items were kept one subject stated that he kept the items just in case. He said that he might use them, eh might not, or he may have a friend that might need it sometime.

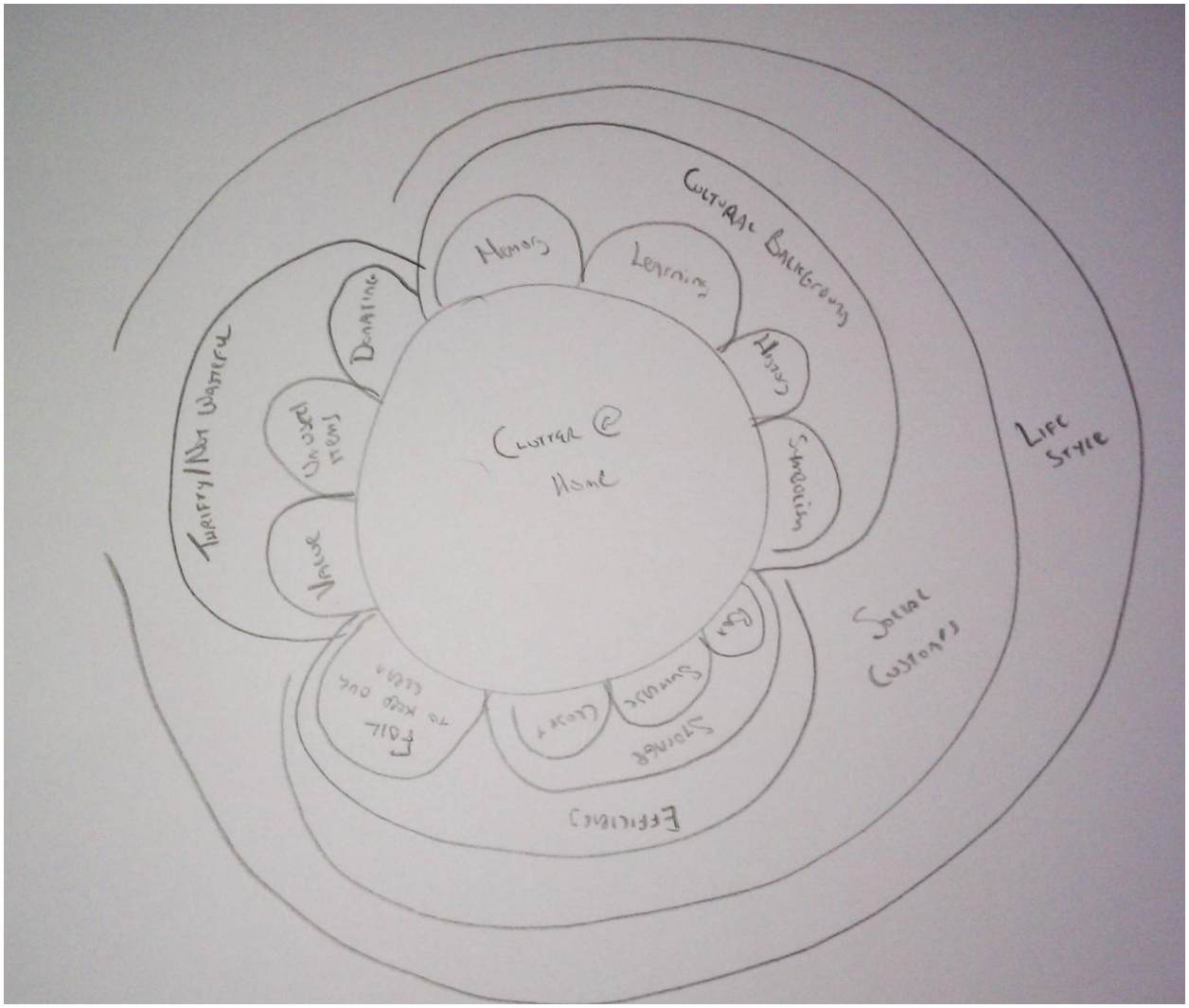
Collectables: Our users kept certain items because they enjoyed having them. For example, the two individuals kept technology books, inspirational books, colognes, clothing, shoes, and spices because they enjoyed having a nice collection.



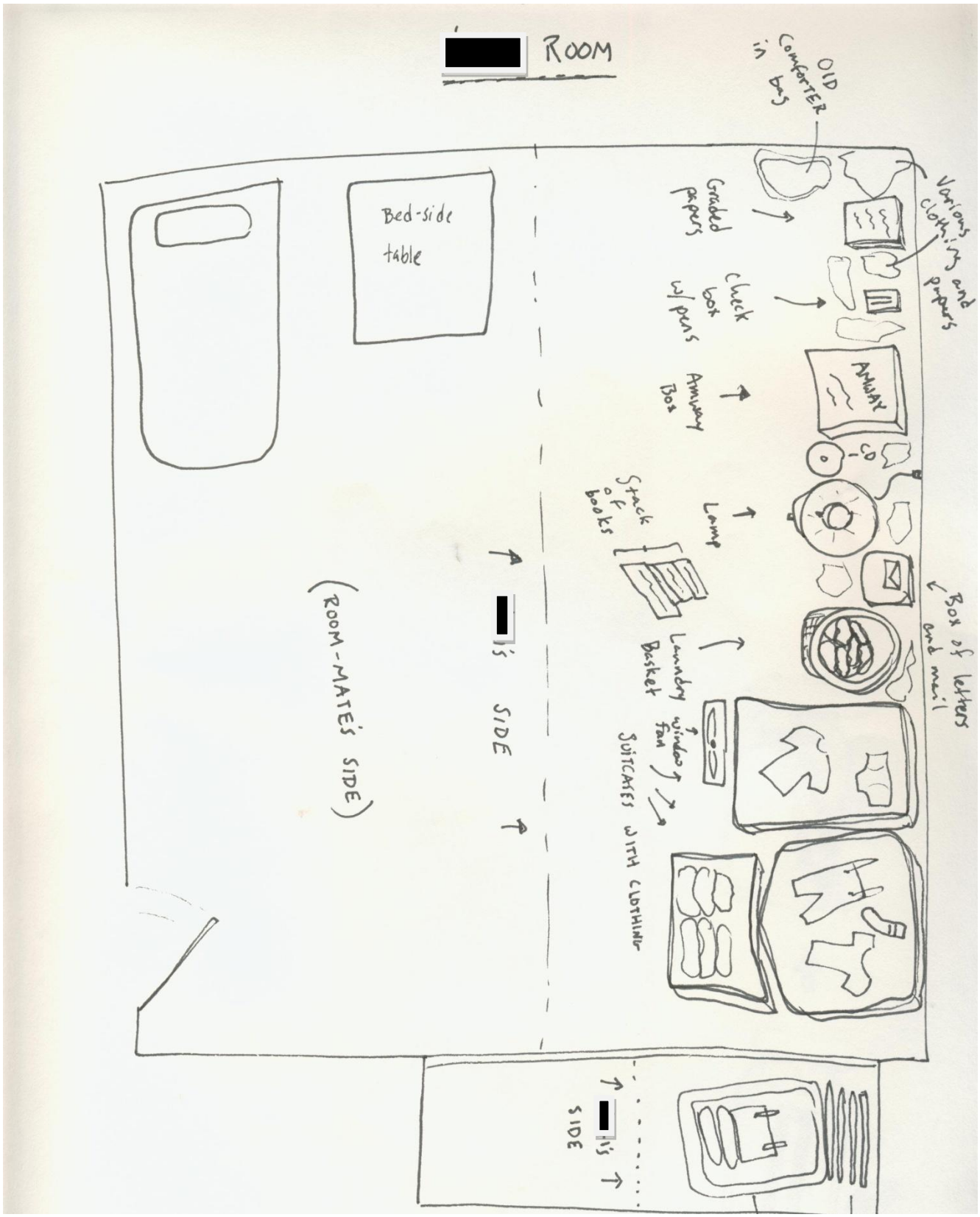
Cultural

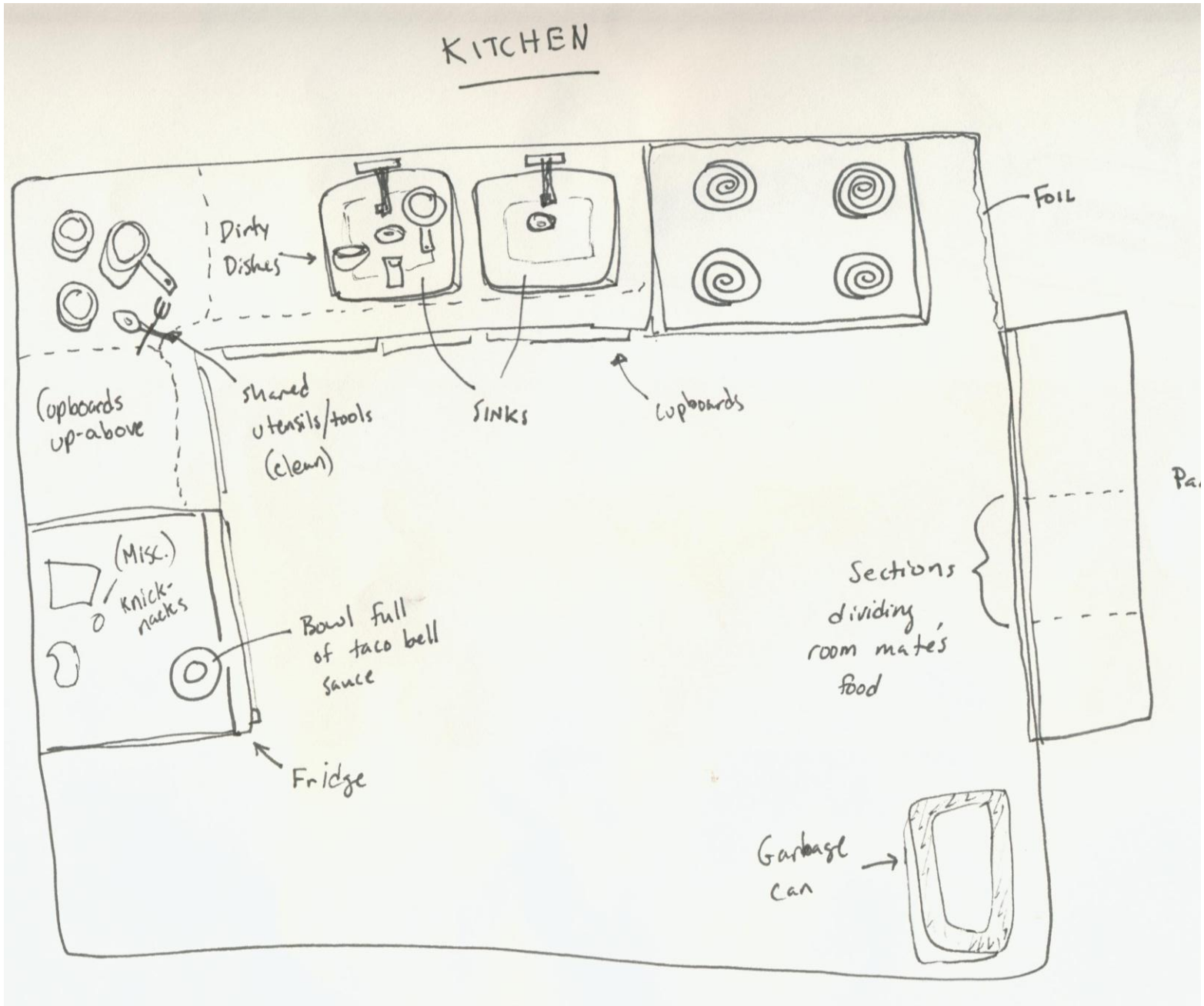
Both of our subjects were international students from India. From our observations, it seems that both subjects value money and bargains. They try not to be wasteful and keep items that can be seen as clutter because of a possible future use. In addition to this, one of our subjects seems to enjoy giving back. He keeps items to possibly give to the church in the future. This fact also leads us to think he is religious. The subjects were hard working individuals and care about education, as seen in the large amounts of books they own.

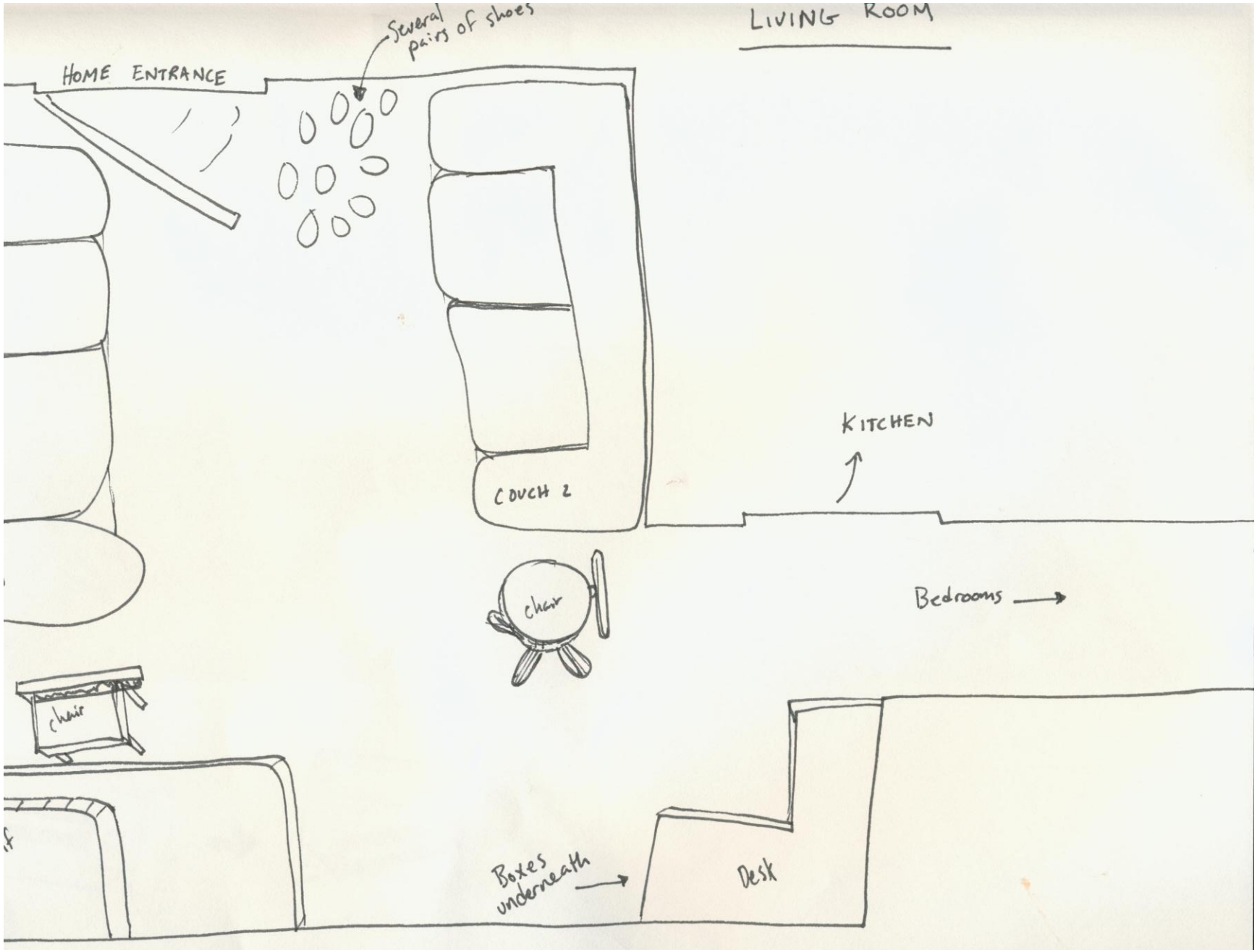
Both UserG and UserY are minimalists, using only what they need. Both live out of their suitcases because they are always on the go. They also use simple items such as cardboard boxes and cups to store items, as opposed to buying a bookshelf or other organizing tools.



Physical


[redacted] ROOM
OLD Comforter in bag
Various clothing and papers
Graded papers
Check bot w/ pens
Armoire
Armoire Box
CD
Stack of books
Lamp
Laundry Basket
window fan
Box of letters and mail
SUITCASES WITH CLOTHING
Bed-side table
[redacted]'s SIDE
(ROOM-MATE'S SIDE)
[redacted]'s SIDE


KITCHEN
Dirty Dishes
Foil
Cupboards up-above
shared utensils/tools (clean)
SINKS
cupboards
(Misc.) knick-nacks
Bowl full of taco bell sauce
Sections dividing room mate's food
Fridge
Garbage can

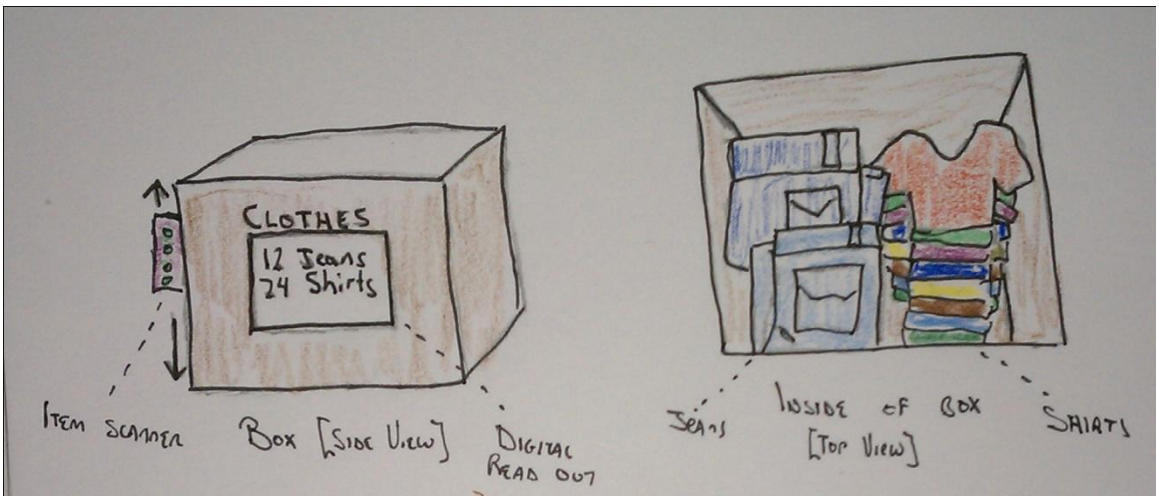

LIVING ROOM
Several pairs of shoes
HOME ENTRANCE
COUCH 2
KITCHEN
chair
Bedrooms
chair
Boxes underneath
Desk

Design concepts

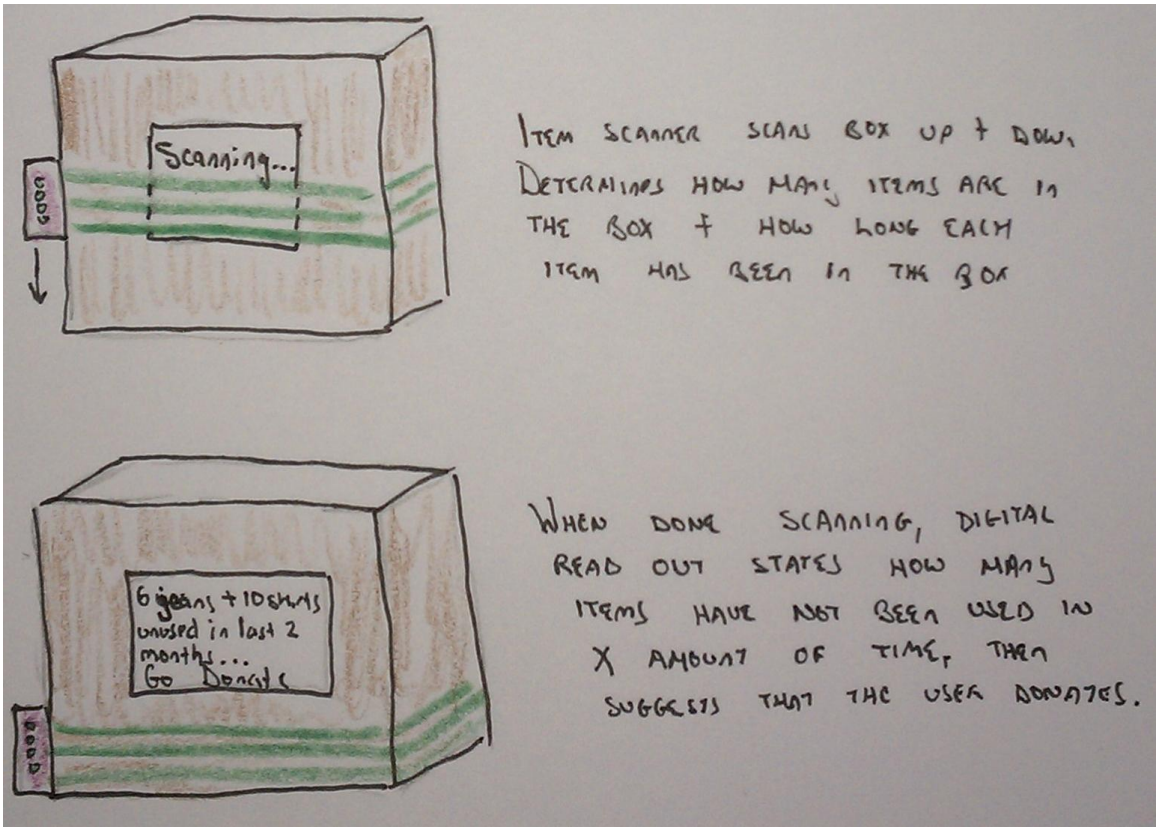
Concept 1

Two insights we found were that our users are not wasteful, and they also like to give back (in the form of donations to the church). Both tend to keep items for a long time, even when they do not use those items. They only throw out or get rid of items when they move out, because they don't need to clean or do not want to.

Because of these insights, we propose a design of an item container (in the sketch below, the container is a box) that has a scanner on the side, and a digital read out on the front.



How this futuristic organizer works is that the scanner will scan the box every time an item goes in our out of the box. A computer system will calculate what items are in the box, how many of each, and how long each item has in the box. The digital read out will then state how many items are in the box.

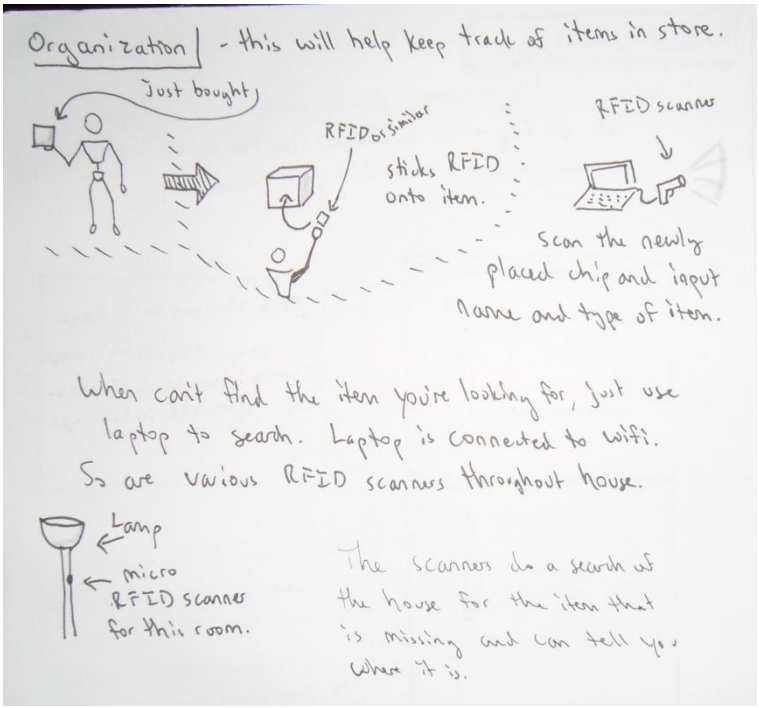


If the system finds that a number of items have been in the box and unused (not taken out of the box) in a certain amount of time, for the example above 2 months, it states how many items have not been used and suggest that the user donates the item.

The idea is that this system will bring the users attention to his or her unused items. If a user does not like to be wasteful and would like to stay more organized, this system will help make the user aware of their useless items and suggest that the user puts those items to good use. For this example, it suggests that the clothing should be donated.

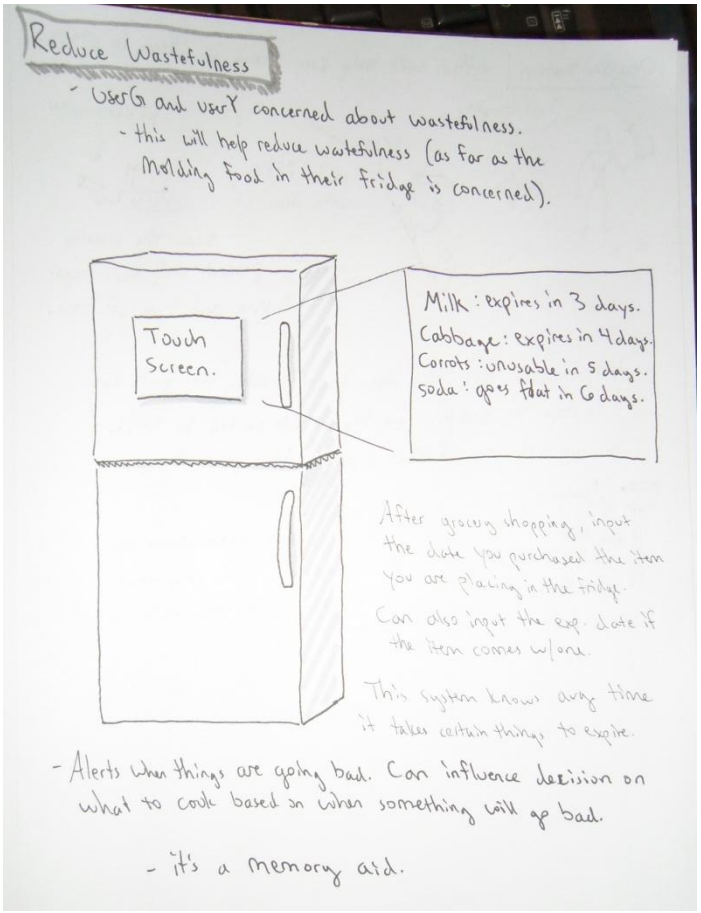
Concept 2

This concept demonstrates a way for people to keep track of their items. After purchasing a new item, one will attach an RFID chip (or something similar) to the object. Then, using a scanner that can attach to a computer on that home's network, scan the chip and input the necessary information about the item (like what type of item it is, a name for the item, and an item description). Later, if the item is misplaced or cannot be found, one can search for the item with the computer attached to the home network. Various scanners placed throughout the house "look" for the item, and report back the location.



Concept 3

This concept assists in the reduction of wastefulness. Our subjects do not like being wasteful, but find that sometimes they forget about what food they have in their refrigerator. This device is attached to the fridge, and lets them put in the type of item they have purchased, as well as the expiration date if the item has one. This device keeps track of the things in the fridge that are likely to expire soon, and warns the members of the household that something is about to go bad. This could be useful in making cooking decisions; by knowing what will go bad soon, the users can decide what they can cook to make sure they use the food before it goes bad.



Critique of affinity diagram

What works?

The affinity diagram was a good tool for pulling all of our data together. There was a lot of overlapping data, but there was also quite a bit of data that one person picked out of the interview that another one of us missed. We were able to focus on different things and know that our data could eventually be consolidated.

What doesn't?

While creating the affinity diagram, we noticed that it was really hard to be specific. We kept running into instances where we were making assumptions about some of the objects. At one point we created a "misplaced items" category, but we realized later that we really were just assuming that those items were misplaced. How do we know that they don't actually keep the fingernail clippers in the kitchen? Maybe that's where they want to keep them.

It was also difficult to come up with groups and categories that followed a consistent metaphor. We had some categories that dealt with the physical location of items, a category that was more of an

“observations” category, and then a few categories that dealt with *why* those items were kept. It was difficult to rearrange those categories into a set of cohesive groups.

What kind of insights can be generated?

This diagram activity gave us some pretty interesting insights about *why* certain objects are kept. There are so many different reasons for hoarding! Things can be kept because they might be useful for the person or someone they know, because they are useful in the collection of other things, because they lead to higher efficiency, and because they are afraid of being wasteful.

We also were able to pull some unique insights about the users and their relationships with their artifacts.

What kind of insights does this technique fail to provide?

What we noticed about the kinds of insights we pulled from the diagram is that none of those insights dealt with how the people in the household interact. All of the insights dealt with the person and his or her relationship with their clutter. We did not see any insights dealing with how userG and userY interact.

It was also hard to notice what *value* certain objects have. We saw all of the items that they had, but we would have been hard pressed to come up with an ordering of most important to least important objects.