



Deployment Report

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Subject Description

Subject Description: Jai & Hitesh

Our participants were roommates, Jai and Hitesh. Both participants are expats from India, in their mid-to-late 20's, working on their Master's degrees in computer science. Our connection to the duo was through our teammate Shakthi. He and Hitesh worked together in a previous academic course, pervasive computing.

Both of our participants had left their home countries, and home diets, to assimilate to a degree within the Indiana food structure. Although surrounded by fast food options, Jai and Hitesh prefer to cook at home, with the

occasional journey to Columbus, IN, to dine at a unique Indian buffet. Both participants have gained weight since arriving in the States, however it is not just their eating habits which have contributed to their experience of weight gain. Both participants have taken up the habit of drinking whiskey on the weekends as a recreational activity. As described by our participants, they can both split one fifth of whiskey on a Friday night. This is of especial interest as we live in a college town, and this described behavior is not unique to our participants. It is likely that we can

derive understanding about the context of Bloomington, and perhaps Indiana more generally, from the eating and drinking habits recorded and described by Jai and Hitesh.



Deployment Summary

Deployment Summary, Pt. 1

One of our participants was out of town over the weekend before spring break. So we deployed our probe and toolkit on Monday the 12th of March once both the participants were back in bloomington.

We presented the participants with both the cultural probe and the toolkit and allowed them to unbox them and explore its contents. Both of our participants were really fascinated by the packaging of the probe and the toolkit and they went through their contents with great excitement.

While going through the contents one of the participants mentioned how amazed he was by the amount of effort we put into it.

While some of the items like the bottle with confetti popped out more prominently and were quickly noticed by the participants. Others like the envelope labeled “Receipts” were less prominent and were discovered later on.



Deployment Summary, Pt. 2

The intended use of elements in the cultural probe was not defined by us. We left it to our participants to decide how they wanted to use them. However, the intended use of elements in the toolkit were well defined. So we encouraged our participants to go through the elements and ask us any questions they had about how to use the contents of the toolkit.

Our participants had one whole week to interact with the the probe and the toolkit. We collected the cultural probe and the toolkit from our participants on the 19th of March. A brief conversation at the end of the week about their experience with the probe and the toolkit told us that they enjoyed interacting with both the cultural probe and the experimental toolkit.



Returned Materials

Probe Materials



Returned Materials Probe

Celebratory Object



One of our subjects painstakingly removed every piece of the confetti, one slip at a time. They presumed that there might be some sort of goodie inside. They were disappointed that there was not.

Uncertainty Objects



The recipes that our subjects included in the Recipe-Envelope did include these ingredients. Indicating that our subjects were familiar with them and were able to make some use of them, or did try them.

Returned Materials Probe, Continued



Mason Jar

Our subjects shared with us an anecdote of their own past-experience using mason jars as vessels for the drinking of alcohol.

Returned Materials Probe, Continued

Instagram Posts

Post 1



Diet coke and Whiskey with Papad and veggies - an Indian version of munchies; our subjects' usual Friday indulgence

Post 2



Tomato rice, or as is known, Tamarind rice - a dish from South India that is easy to cook and delicious in taste, pretty popular amongst students due to short cooking time.

Post 3



Indian style spicy potato - a dish consumed across India with multiple variations, it can be eaten with rice, bread (roti) or even just as a snack.

Returned Materials Probe, Continued

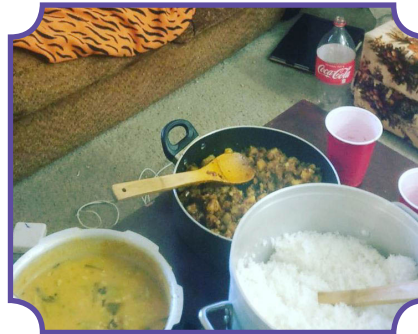
Instagram Posts, Continued

Post 4



Chicken Biryani - A delicacy for any non-vegetarian and famous around the world. Our subjects spent almost five hours on this and worked their ass off until 1 AM to make it perfect!

Post 5



Indian style lentil dal, chicken fry and rice - A usual multi-dish Indian dinner, healthy due to the lentils and unhealthy due to the fried chicken. Tasty nevertheless, our subjects love having rice.

Post 6



Jack Daniels Honey Whiskey - Our subjects expanding their tastes and preparing for their Friday night ritual.

Returned Materials Probe, Continued

Instagram Posts, Continued

Post 7

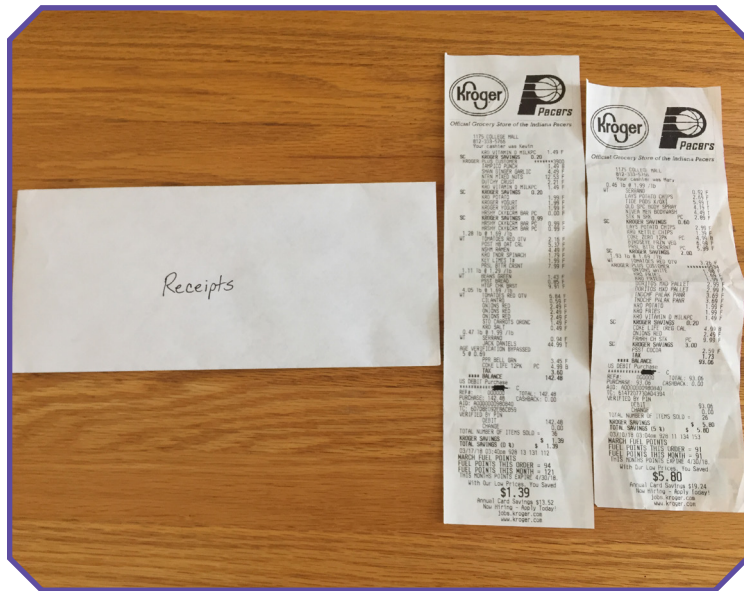


Spinach and lentil dal
- Our subjects' try at
cooking a healthier
version of the lentil
dal.



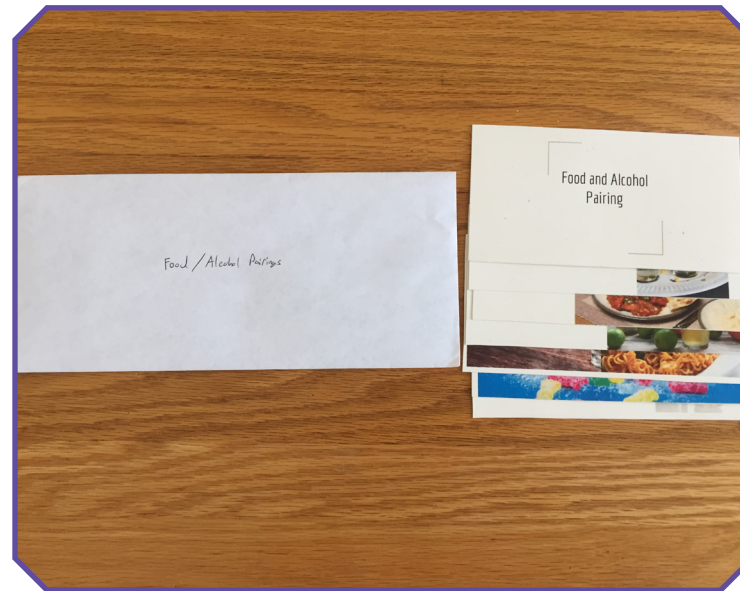
Returned Materials Probe, Continued

Receipts



Our subjects included two receipts from shopping trips taking place over the course of the deployment. One trip took place on 03/10/18, and amounted to \$93.06, and the other on 03/17/18 to \$142.48. The items listed mostly consist of either vegetables or alcohol.

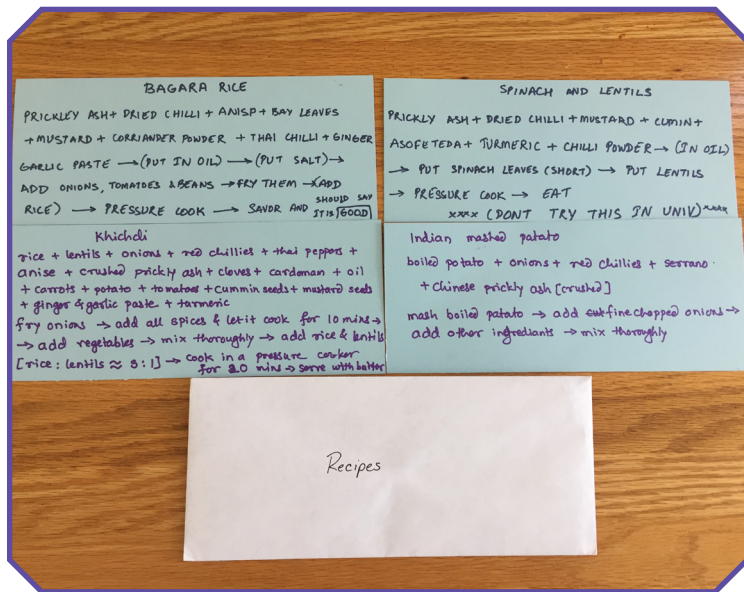
Food & Alcohol Pairings



Our subjects reported that they did not make use of these.

Returned Materials Probe, Continued

Recipes



Our subjects did write out several of their go-to recipes and include them in the designated envelope in our probe.

Bagara Rice

"PRICKLEY ASH + DRIED CHILLI + ANISP + BAY LEAVES + MUSTARD + CORRIANDER POWDER + THAI CHILLI + GINGER GARLIC PASTE → (PUT IN OIL) → (PUT SALT) → ADD ONIONS, TOMATOES & BEANS → FRY THEM → (ADD RICE) → PRESSURE COOK → SAVOR AND SHOULD SAY IT IS GOOD

Spinach and Lentils

"PRICKLEY ASH + DRIED CHILLI + MUSTARD + CUMIN + ASOFETEDA + TURMERIC + CHILLI POWDER → (IN OIL) → PUT SPINACH LEAVES (SHORT) → PUT LENTILS → PRESSURE COOK → EAT
 **** (DONT TRY THIS IN UNIV) ****"

Returned Materials Probe, Continued

Recipes, Continued

Khichdi

“Rice + lentils + onions + red chillies + thai peppers + anise + crushed prickly ash + cloves + cardoman + oil + carrots + potato + tomatoes + cummin seeds + mustard seeds + ginger + garlic paste + turmeric

fry onions → add all spices & let it cook for 10 mins → → add vegetables → mis thoroughly → add rice & lentils

[rice : lentils = 3 : 1] → cook in a pressure cooker for 30 mins → serve with butter”

Spinach and Lentils

“boiled potato + onions + red chillies + serrano + chinese prickly ash [crushed]

Mashed boiled potato → add cut fine chopped onions → add other ingredients → mix thoroughly”

Toolkit Materials



Returned Materials Emotional Toolkit

Hitesh

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Green	Orange	Green	Green	Orange	Orange	Green
Noon	Green	Green	Orange	Green	Orange	Orange	Green
Evening	Green	Pink	Orange	Orange	Pink	Pink	Green

Hitesh told us that he did feel that food affected his emotions. He felt that eating food he enjoyed would improve his mood to a noticeable degree.

Jai

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	cool	bored	calm	cool	proud	sad	sad
Noon	sad	calm	angry	stuck	bored	calm	happy
Evening	sad	angry		happy	exhausted	calm	grateful

Jai did not feel as though food affected his emotions. He felt that his current emotions would have more of an effect on what he chose to eat. Those emotions would then persist, unaffected by the food eaten.

Returned Materials Journey Mapping

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Indian Breakfast (DOSAs) BREAKFAST	CORN FLAKES (BF)	Croissant BF	Croissant BF	Croissant B-F	NaN BF	Corn Flakes (BF)
BIKANI LUNCH	LENTILS L	NaN L	NaN L	NaN L	NaN L	Lentil Rice L
CHICKEN CURRY DINNER	PIZZA D	Dinner Egg Curry Rice	Dinner Pizza	Dinner Pizza @ Some Rice	Dinner Chicken & lentil Rice	Biryani D

Hitesh's meal plan for the week.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Coffee Indian Dosa & Tea B-F	Coffee Croissant B-F	Coffee B-F	Coffee B-F	Coffee B-F	Coffee B-F	Coffee B-F
Halwa Puri & Samosa L	No lunch Tea	Tea also Curry (leftovers) Rice	No lunch Tea	No lunch	No lunch	Tea
Tea & Pizza	Tea Jeera Rice and lentil Dal WHISKEY	Chicken Biryani & Pizza WHISKEY	Tea [Outside] [Coffal and wrap] Chicken Wings WHISKEY	Chicken Curry Rice Whiskey Tea Pizza	Main Rice & Indian spices Tea	Dinner at Denny's Veg Burger & chocolate Lava Cake

Hitesh's actual diet, recorded post-meal.

Returned Materials Journey Mapping, Continued

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Chicken Biryani 2 PM	Rice & Curry (lentils)	Egg Curry	Curry [Potato + capsicum + tomato] & rice	Chicken Curry	-	-
Rice & Curry (lentils)	Scrambled Eggs	Egg Curry	same as above	pizza	-	Outside Hu-Hot

Jai's meal plan for the week.

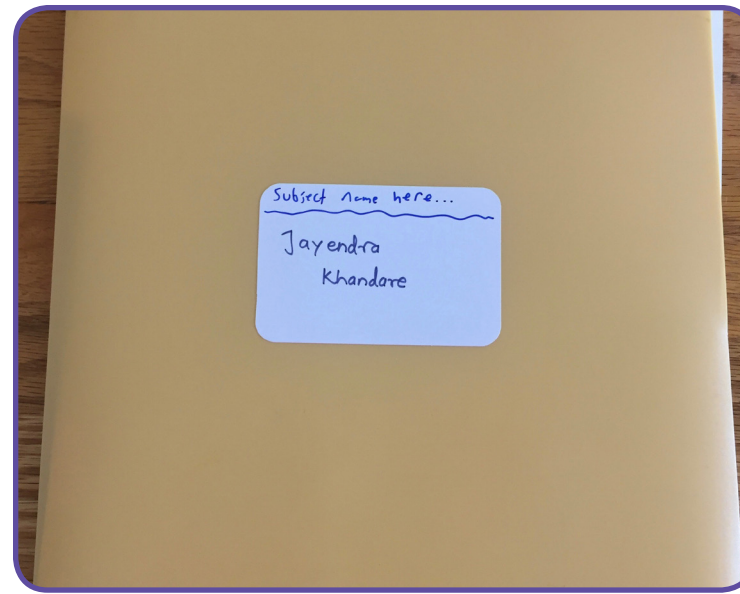
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Chicken Biryani 2 PM (IND) + aalu chat + samosa [potato Snacks] tea 6 PM Chinese takeout	chicken Biryani from yesterday Rice & Daal (lentils)	- coffee Khichdi (Indian cuisine) [rice + lentils + potato + etc]	Khichdi from last night Cup ramen x 2 @ 8 PM Hot cocoa @ 11 PM	- coffee Potato curries [2 varieties] + alcohol w/ whiskey & coke [500ml] + Indian Snacks	Malu pan (Sri lankan) salmon cakes [friend's place] Potato curry @ 8 PM Scrambled Eggs @ 12	- tea Khichdi @ 8 PM Khichdi @ 3 AM of Sunday

Jai's actual diet, recorded post-meal.

Returned Materials Journey Mapping, Continued

Journey Meal Mapping, Interpretation

Both of our subjects indicated that they had a difficult time charting their weekly food plan. They do not normally plan out their meals. Their weeks are a mix of improvisation and interplay between each other. One will often cook for the both of them, and then the other will also cook to even things out. However, due to their schedules sometimes this cooking will take place at hours that are very odd and inconvenient for the other. Additionally, they will often skip breakfast and/or lunch.



Interview Summary

Interview Summary

Format: Semi-structured

Interviewers: Austin, Collin, Yash

Interviewees: Jay, Hitesh

Location: Subjects' home in Bloomington

Time: Sun, Mar 25, 2018; 11 AM

Duration: 45 mins (approx)

Could you mention some articles you were drawn to, and why?

1. Ball Jar was an interesting article since it reminded the subjects of drinking beer. It was used by them for hot cocoa.
2. Recipes were fascinating due to their unique nature, but weren't tried out mostly due to the self-identified lazy nature over spring break. One of the roommates also had a friend over from California which led to a couple of meals being or from outside.





Interview Summary, Continued

How did you plan out your meals?

1. Breakfast is something that isn't hard and fast for the subjects since it is skipped a lot of times, due to waking up late. One of the subjects does however try to incorporate breakfast into daily life and consumes croissants, bread and/or corn flakes or cereal.
2. Lunch was usually divided amongst the two roommates and constituted mostly of rice along with some pulses, such as a variety of lentils or beans. The go to utensil is rice cooker for this purpose due to its simple and easy-to-use nature.
3. Dinner would usually be cooked by the two of them since they would be home together, but would get delayed sometimes due to one of them cooking an extravagant dish that takes more time.
4. Friday evenings were usually reserved for a fun time where something different than Indian cuisine, such as a Pizza would be on the cards, along with some hard beverages.



Interview Summary, Continued

What is usually your drink of choice?

1. Currently whiskey: Jack & Coke for Jay and a neat for Hitesh
2. Our subjects were beer drinkers earlier but were recommended whiskey by a friend and that's how the transition happened
3. The subjects have an exploring nature when it comes to alcohol and are more than willing to dry out different variations of hard liquor.

How did you approach the emotional chart?

1. Jay had a neutral stance on the food he had and said it didn't affect his emotions much. He did however mention that there were other things going on in life that would affect his mood such as the job search and interviews. He also said that maybe if it were something from his homeland, that would make him very happy. Ex: Thecsa, a spicy Indian dish
2. Hitesh had a positive outlook on the food he ate and even went on to say that the emotional chart was a reflection of feelings he had after eating food since food was important to him and something he looked forward to.

Interview Summary, Continued

Could you expound a bit on the receipts?

1. Money wasn't a limiting issue for the subjects, which sometime led to a free hand in purchases
2. The subjects would buy common stuff such as vegetables everytime they were at the market since both would end up using them
3. They also would have croissants for breakfast, sometimes dipping them in tea, a remnant of the previously present colonialism in India. The subjects would however avoid butter due to being selectively health conscious.
4. Although not while we were there, the subjects did mention trying to have a healthy diet in the morning by having wheat bread, and oats.



Design Directions

Design Direction: Countdown

Many of the enjoyable aspects of people's daily lives contribute to obesity. Relaxation, the consumption of alcohol, and most cheap and/or easily accessible delicious foods are all considered unhealthy even in moderation.

In order to lose weight or stay healthy once they've lost it, one must eat right and exercise. But eating right all the time can be difficult, and the more one slips up, the easier slipping-up can become.

But perhaps slipping up doesn't have to be seen in such a negative manner. As one sets goals, they might be allowed to incorporate self-indulgence as part of their system.

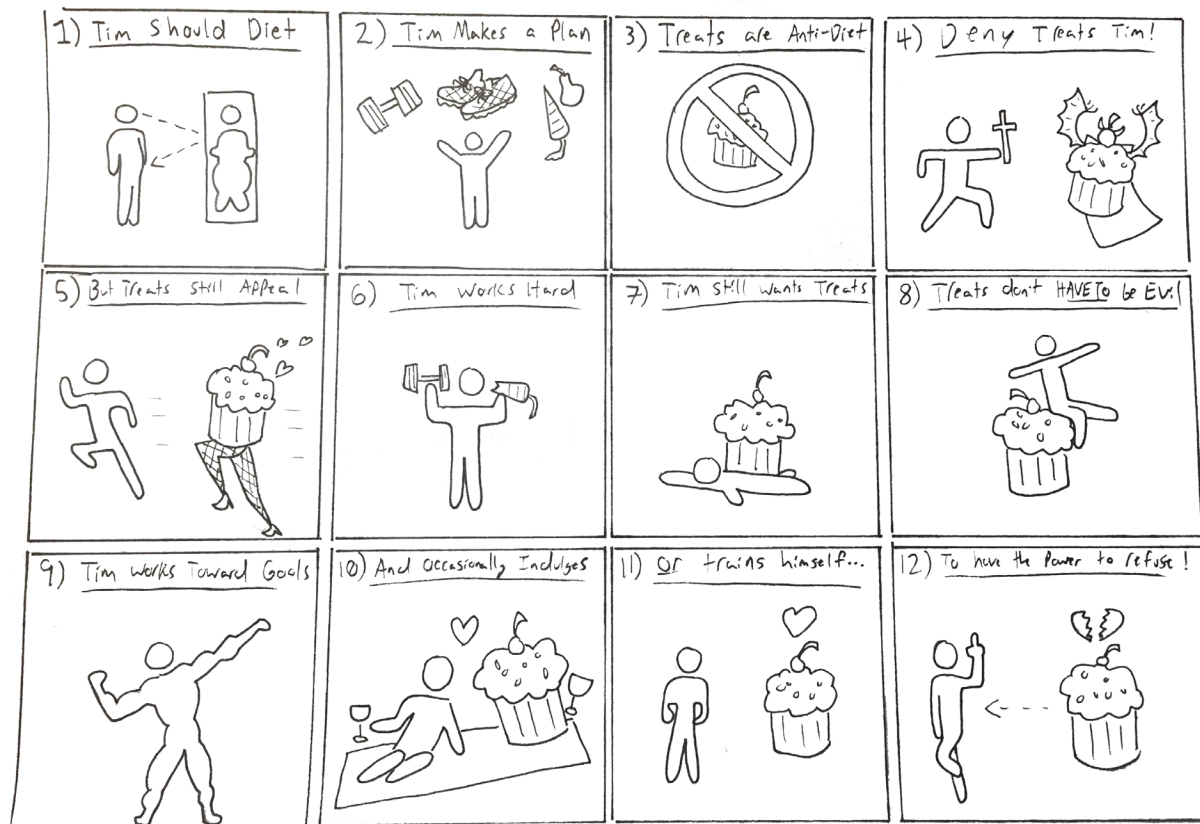
It's important to keep one's goals and strategies in mind when planning out their health maintenance. As an individual outlines their dietary and exercise plans, they would also be encouraged to set up rewards for themselves. These rewards might be few and far between but the individual's expectation and excitement at this "reward" may help them focus on their current

dietary efforts. It also gives the individual something specific to look forward to.

As a side benefit, this may also facilitate the development of willpower. If the individual can put off treats for longer and longer periods of time, they maybe be able to eventually put it off indefinitely.

Storyboard on the following page.

Design Direction: Countdown, Continued





Design Direction: Portion Control

One of our key insights was that our participants enjoy an evening dram on the weekends. More than one, in fact. To be certain, drinking whiskey isn't a problem, but the amount definitely is: 15 portions x 70 cal = 1050 cal. That's a whole lot. And chances are, our participants are unaware of this large portion. Yet, our participants reported that they would regularly drink an entire bottle on the weekends.

It is common that we do not believe for there to be much caloric consequence when we consume liquids. This misconception leads many people to unfit goals, and given the depressive nature of alcohol, complicated body image cognition.

Now, we believe it is important to enjoy the libations of a healthy spirit, but in the manner that they were intended. Portion control. How might we imbue this characteristic on our participants, or those with similar tendencies? Four possible design directions are on the following page.

Design Direction: Portion Control, Continued

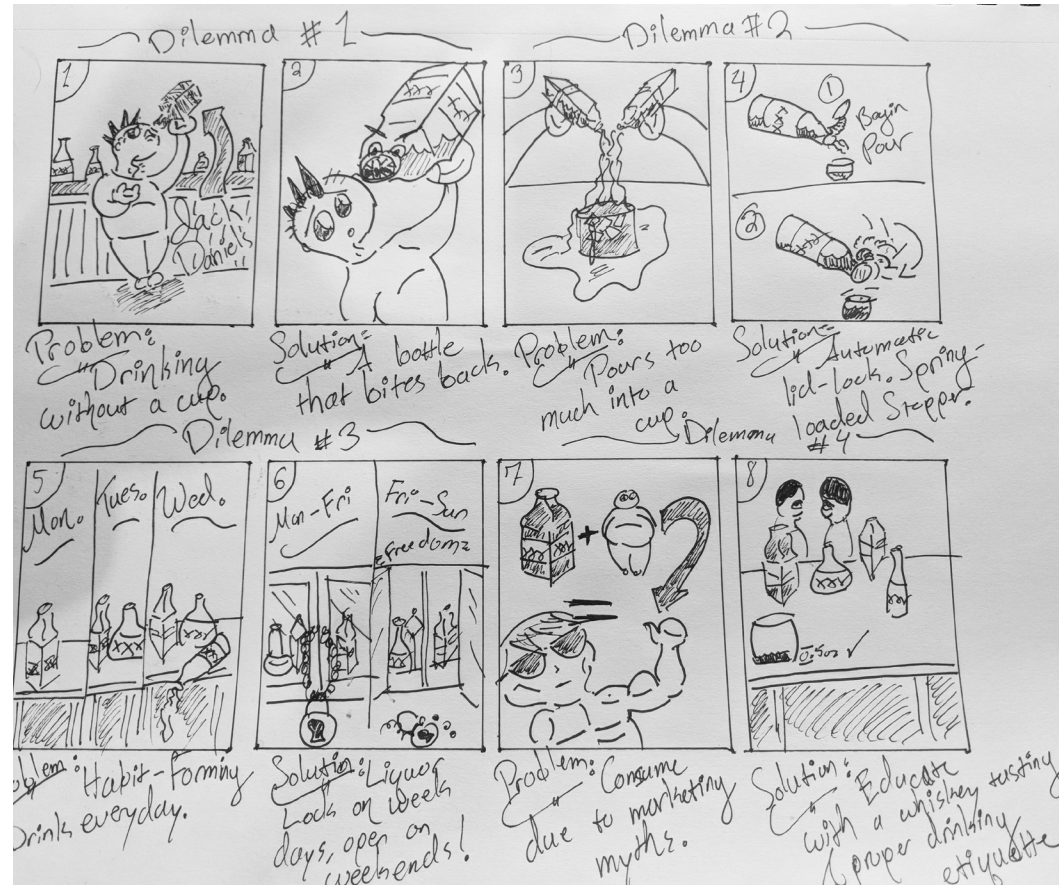
Design Dilemma #1 is critical in nature, and pokes a little fun at the idea of restraint. In frame 1, the character is drinking whiskey straight from the bottle. In frame 2, the idea of the bottle having razor teeth would certainly stop the habit of drinking from the bottle. This, then, would encourage pouring their drams and perhaps measure their portions while they are at it.

Design Dilemma #2 explores the idea of free pouring (frame 3). To assist in measuring pours, bartenders typically have a specialized fixtured, which allows air pressure to cut a pour off after 2oz. However, this is inaccurate, and many do not have these in their homes. What if there was a mechanized, spring-loaded bottle sheath (frame 4)? After a sensor-measured pour, the bottle would slice off the flow of spirit with gusto, resulting in an extra effort by the user to “reload” the spring. It might not be worth the hassle, and they will be left with a portioned pour.

Design Dilemma #3 explores the idea that alcohol, in its nature, is chemically habit forming (frame 5). A bottle may be consumed over a week, instead of a month if it is drunk too often. Frame 6 then explores a metaphorical “liquor lock” on a cabinet, which is calibrated to only open on the weekends, used in tandem with spring-loaded portion pourers, of course.

Design Direction: Portion Control, Continued

Design Dilemma #4 explores the idea that whiskey and other spirits are not marketed on their flavor profiles, rather liquor porn and the body image, or escape which may be achieved when paired with the bottle (frame 7). Frame 8 explores the simple idea of an informative, enjoyable, social tasting experience. In such, users will be informed about proper portions, the legacy and time involved in making the spirit, as well as exploring the nuances of flavor locked in the distillate. Then, then, may curve binge-drinking, bringing appreciation and respect to both the spirit and the user.



Design Direction: Dietary Shopping & Habits

Our subjects were international students from India and this was an interesting area to explore since there's a completely different perspective that expats bring to a foreign country in the context of dietary and shopping habits. A big reason for this is the unavailability of food and raw materials in a foreign country that might be commonplace in their native country. For example: People from South East Asian diaspora have to visit the Indian store on 10th Street in Bloomington in order to buy groceries for cooking Indian dishes. Similarly, people from Northern Asia

have to head to the International market next near College Mall since they're unable to find the necessary ingredients at a regular supermarket such as Kroger, Luckie's or Target. In spite of these stores, there might still be some materials that aren't to be found in a small city such as Bloomington. This could lead to potential disruption in dietary and shopping habits such as students moving onto a more meat-based diet or increasing the consumption of milk/ wheat bread due to easy availability.

In addition to this, another variable that could affect students' shopping habits would be the change in currency. Usually, a dollar is much more valuable than the currency of some developing countries. For example, \$3 = 200 INR (Indian Rupees). This leads to people, especially students, to spending more money since at least initially, their mental model is still used to the one of their home country where you might get candy for 3 INR.

Design Direction: Dietary Shopping & Habits, Cont.

A possible design direction for this problem could be providing a tool for comparative foods available in the given store. This could be a part of the store's directory or online ordering feature. For example: Kroger owns the Clicklist platform through which people can order stuff online for delivery or pickup. There could be recommendations on similar foods based on the cuisine you're looking for. There could also be a store reorganisation based on types of cuisines for the users.

Below is a rendition of how the feature could look like on a store's website or app.

ClickList®



Bush's Black Beans - 15 Oz
UPC: 0003940001880



Similar to Chitkabra Rajma, also known as Red Kidney Beans

Reflections



Reflection: Austin

I was pleasantly surprised that our subjects used most of the items in our Probe, and they did fill out the tasks in our Toolkit package. In our post-deliverable interview they were very open and forthcoming about their experience with the items, and their food-habits in general.

To me, the advantages of a Probe or a Toolkit lay in their facilitation of ideation. Our subjects participation and interaction with the items they have been given presents the opportunity for in-the-moment sort of observations. Where an ethnography session or contextual inquiry should mostly preclude our influence as researchers, these methods allow us to steer a subject in a direction of our interest while allowing them to retain their autonomy.

In the future if I were to deploy a probe or toolkit I'd like to, on some level, do a contextual inquiry first. Once I've observed my subjects in their natural habitat I can begin to gauge what problems they face that I might try to focus on approaching designs for.



Reflection: Collin

What was fascinating to me is that both Jai and Hitesh were very open about how they utilized the probe package and toolkits. It seemed to me that both of our participants were more eager to speak positively about the probe package. For example, Hitesh remarked that they both enjoyed the glass (mason jar), which they took turns utilizing as a container for coffee or alcohol, or liquid in general. They mentioned it reminded them of pub glasses they saw at a particular restaurant. In contrast, when evoking some of the food patterns we structured in our emotional mapping toolkit, our participants seemed more distanced. For instance, Jai made explicit that the food he ate did not influence his mood. This was interesting, as we did not explicitly suggest that we were seeing the influence of food consumption on mood (rather we were looking at the relationship between food, alcohol, and mood). Nonetheless, our participant intuited his own perception of our reasoning.

Continued



Reflection: Collin, Continued

Though, this is by no means a negative perception by myself as a researcher or interviewer. Our participants were so very amicable at the interview. They even gave me some coffee! After our interview concluded, I asked for them to be my Facebook friend and to join our cohort in a hot pot night. They were just that cool!

Looking back, the one major fault and assumption that we did not account for was that mood is influenced by a multitude of factors, not just food and alcohol. In fact, Jai expressed that food does not affect his emotions, nor Hitesh, who described he freely eats as he feels. I will take the gentlemen's words at face value. With this in mind, I would be interested in adding a cognitive toolkit. With a cognitive toolkit we would be able to probe their beliefs about anxiety, depression, and general affect. This way, we could evoke a more robust model of emotions from both participants, and perhaps gain greater insights into what was recorded.

Continued



Reflection: Collin, Continued

The probe package and toolkits brought out in me a confidence which was steeped in inductive reasoning (as was our toolkit to satisfy our presumptions about food, alcohol, and emotions) as well as deductive (which was the artistic reason-making of our probe package). Nonetheless, nothing could have prepared me for the insight which occurred at our interview. The secret ingredient to this research is that our participants were extremely amicable, personable, and comfortable being who they were in the presence of strangers. I am unsure how to strike this balance in an artificial manner, nor am I sure whether or not I would wish to do so. It was magic, and in the context of a design space not only did it supply me with the information I needed to proceed, but it reassured me with the desire that I would enjoy designing for Jai and Hitesh.

Continued

Reflection: Collin, Continued

General insights which can be pulled from probes, triggers, and toolkits are the ways in which we objectively create our lifeworld. This can be through recording habits, codifying occurrences, or other forms of mapping techniques. This can be through encouraging play through probes; this is very powerful because the lack of instruction takes away expectations to perform to a certain degree, and replaces it with mystery and more freedom to our participants. What these techniques do best is provide a medium for participatory research and lifeworld building.

What these techniques fail to do is provide a full picture on their own. They must be used in tandem, and at different times in order to develop trust and honest elicitation from our participants. Further, we as researchers run the risk of believing too fully in one of our techniques, biasing our information, thus sculpting a lopsided picture of the life our participants lead.

Reflection: Shakthidhar

I would like to thank my friends Hitesh and Jai for participating in the study. As their contributions were key to the success of our study. As I knew both of the participants in this study some of the findings or insights that we gained from our cultural probe and the toolkit were things that I expected. For example, I expected them consume a lot of alcohol.

However, the findings from the emotional toolkit were quite intriguing as there was quite a lot of disparity between the emotional charts of our two participants. While Hitesh reported a lot of positive emotions, Jai reported a lot of negative ones. Also, while Hitesh expressed that eating food that he loved did improve his mood Jai reported that it had no effect on his. These findings led to an interesting insight that food does not always dominate how we feel. This is something that we would not have been able to learn from ethnography or contextual inquiry.



Reflection: Yash

It was a breeze to work on probes and toolkits and I'd like to first thank my team for letting me be a part of it. I'd also like to thank the subjects for readily accepting our invitation for the week long study and for using most of our materials from the probe and toolkit. The way they ended up using these materials was intriguing, especially the food plan and emotional chart, since those are materials they interacted with on a daily basis.

While some materials elicited a neutral stance in usage, others had a positive or even negative response when dealing with our package items. For example, it was hilarious to come to know that the confetti in the wine bottle was taken out one by one by the participants, which our guess says was most likely done in an inebriated state! The post deployment interview was great in gauging the subjects' feelings and engagement level towards the probe and toolkit, most of which was positive. It also helped us observe their body language which told us that in spite of being so open and upfront with us, they were aware of their body image and used humor consistently to overlook or perhaps avoid it. To this point, we feel it would have made our probes and toolkits even more engaging and successful had we done an interview with our subjects prior to deployment, which would also have helped us tailor them to explore particular habits or activities of our subjects.

Continued

Reflection: Yash

Nevertheless, it was great working on such an open ended prompt that gave us freedom in picking out materials for exploration as well as how and where they should be deployed. I definitely see value now in this kind of research exploration where the subjects interact more closely with artifacts for a sustained period of time rather than a short interview or contextual inquiry.