ethnographic research methods
second assignment

I created and played a new card game with friends. This fun and random game was based on the improv games played in class last week. Everyone started with 7 cards. The dealer first lays a card followed by the remaining players in counterclockwise order. After a player lays a card, they follow with one sentence made up off the top of their head. A jumbled and confusing story is formed with each player contributing. If at anytime a card that possesses the same numerical value or color of another card in a player’s hand, that player could lay his or her card out of turn and interrupt the story with their new sentence.
second assignment
silly product ideas

Cookie Muncher

Jar that bites you if you use it too many times in 24 hrs.

as noted in the slides and online assignment ideas should be visual at least 10 ideas EACH A SEPARATE IMAGE with a title on each idea
second assignment
silly product ideas

UFO Helmet
* UFO light up bicycle helmet
  * designed for night riding
  * spring operated with 8 power buttons — flashing options
  * illuminated helmet and dark body/bike under seat
  * great visibility to vehicles

Puddle's Foot Massager
* battery operated foot massager
  * spring loaded function with two massaging mechanisms: one on left and right
  * use while sitting down only — slipper/sock not intended for wearing

Pez Pill Dispenser
- doctor-themed Pez-like pill dispenser
- press down to release one pill
- refillable cartridge
- doctor on top to ensure kids don't get a hold of it
- can be used for daily pills
- can be used for pills only needed sparingly such as-inspired
second assignment
mind maps!
explore the space
-hoeper
second assignment
mind maps!
second assignment
mind maps!

how much do we branch out?
second assignment
mind maps!

free thinking vs. over thinking
second assignment

choose a sub-theme

interviewing users/experts and doing research in this area for problem finding

1. Sleep
2. Exercise for people with disabilities
3. Seasonal health
4. Stress Management for Parenting
5. Prosthetics
6. Gamification of Physical Health
7. Healthy Food Accessibility
8. Muscular Dystrophy
9. Water Filtration
10. Fitness Technology for College Students
11. Haptics
12. Kitchen Sanitation
13. Balanced Nutrition
14. Impact of Online Gaming
# Assignment 2

## Do something fun

1 = A short description of what you did and why with a photo! This fun activity should be something you don’t typically do and should be something that you are **not already planning to do anyway**.

0 = No documentation what you did.

## Mind Map (image)

1 = A well formatted image of your mind map that explores the domain of “health and wellbeing.” Every item on the map has text and text is clean and legible. The mind map shows that you thought through many of the topics related to the overall theme. This map should reflect at least an hour of work. This can be done directly in the web application but an image of the map is still required here.

0 = No mind map image.

## Mind Map (digitization)

1 = If you made your mind map first on paper, translate your map into the web application and let us know if you made the map first on paper. Please use Chrome to ensure there are no glitches with the application. If you made your map directly in the web application, simply let us know that here.

0 = No linked mind map

## Suggested Themes

1 = A list of 3 specific themes that you think are interesting to explore within the domain of “health and wellbeing.” These themes should be of the correct scope as described in class and pulled directly from your mind map. For each include a statement on why this is a worthy area of exploration for problems and needs.

0 = Did not list themes

## 10 Silly Ideas

5 = A half point for every “silly” idea that is presented with a cleanly documented sketch and title

0 = Did not include any idea sketches

## Outline

1=Posted outline and timeline on time.

0= Did not post outline and timeline.
prompts

need
opportunity
problem
process
product
process
product
technology
technology

context

problem
need, or opportunity

product
or process

market pull

ethnography
observation

technology push
ethnography *(folk + write)*
documenting customs of individuals and cultures or
science of contextualization

design detective - finding hidden problems, needs, and opportunities

experience, observe, ask
empathy
- the ability to imagine yourself in someone else's position and to intuit and feel what that person is feeling.

female brain is predominantly hard wired for empathy. the male brain is predominately hard wired for understanding and building systems - simon baron-cohen.

ethnography

mirror neurons

mirror touch synesthesia
ethnographic tools
level 1 - ask

- surveys
- focus groups
- interviews
ethnographic tools

level 1 - ask

surveys

Likert “lick-urt” scale

central tendency bias
forced choice
higher point / higher mean
keep it simple and objective
open ended questions: _____________________
ethnographic tools

level 1 - ask (un) focus groups

"They just ensure that you don’t offend anyone, and produce bland inoffensive products."
- Jonathan Ive
ethnographic tools

level 1 - ask

encourage stories
no binary, yes/no questions

use open questions like:
tell me about an experience you had with...
tell me about the last time you...
can you show me how you...
can you walk me through how you...

be neutral
ethnographic tools
level 1 - ask interviews

“so what don’t you like about opening pickle jars?”

OBJECTION! LEADING!

BIASED

AND LOADED
ethnographic tools

level 1 - ask interviews

encourage stories
no binary, yes/no questions

use open questions like:
tell me about an experience you had with...
tell me about the last time you...
can you show me how you...
can you walk me through how you...

be neutral

keep them talking
ask why, why why
i don’t shave very often

why? i don’t like shaving
why? it takes too much time
why? i have to clean up the hair in the sink
why? don’t want the hair down the drain
why? the drain can’t handle hair

getting to the root of the problem may uncover opportunities
ethnographic tools

level 1 - ask interviews

encourage stories
no binary, yes/no questions

use open questions like:
tell me about an experience you had with...
tell me about the last time you...
can you show me how you...
can you walk me through how you...

be neutral

keep them talking
ask why, why why
don’t be afraid of silence
don’t interrupt
have backup questions

record
with photos
voice recorder or video or someone else taking notes
ethnographic tools
practice (with the IDEO Bootcamp)
find problems, opportunities, ideas

0 - partner, each person asking about last doctor check up
1 - interview 5 min (then switch)
2 - dig deeper 4 min (then switch)
3 - capture finds (needs and insights) - 5 min
4 - define problem statement - 3 min
   ___ needs to ___ because ___
5 - generate a few alternative ideas - 5 min
6 - share your ideas and get feedback - 5 min each
7 - reflect and generate a new solution - 3 min

encourage stories
no binary, yes/no questions

use open questions like:
what is your most memorable experience with...
tell me about an experience you had with...
tell me about the last time you...
can you show me how you...
can you walk me through how you...

be neutral

keep them talking
ask why, why why
don’t be afraid of silence
don’t interrupt
have backup question
ethnographic tools

unpacking

quotes people said that were of interest?
what did people like, dislike, want, not want?
what behaviors and actions did you observe?

synthesize each cluster into an overall finding/insight
ethnographic tools
practice (with the IDEO Bootcamp)
find problems, opportunities, ideas

“I get frustrated cleaning the cutting board after i prep stuff”
(why?)
“because it doesn’t fit in my sink and so usually leave it messy and it
gets sticky”

needs: clean, cut, prep, fit, relax, unstick

insights: it is difficult to clean cutting boards, people do not clean things
outside of the sink, some people do not clean their cutting surfaces well,
cleaning can be frustrating

Sally (a busy 35 year old mom who loves cooking for friends)

needs a way to: prep/cut food with less mess
               clean cutting boards
               fit large items in her sink
               unstick sticky stuff from cutting boards
               relax while cleaning

because:
               some cutting boards can be difficult to clean
               not all cutting boards are easily cleaned in sinks
               people do not want to clean things outside of the sink
               some people do not clean their cutting surfaces well
               cleaning tasks can be frustrating
needs a washing machine that uses less water...
...needs a washing machines that wastes less water...
...needs a washing machines that can clean without water...
...needs a sustainable way to maintain clean clothes...

‘The ability to ask the right question is more than half the battle of finding the answer.’ - Thomas J. Watson

ethnographic tools

solutions are no longer tied to the embodiment of a washing machine

people don’t need drills, they need holes in things
ethnographic tools

level 1 arguments

most customers are good at comparing your current offerings with their current needs, but they are not so good at helping you plan for new-to-the world stuff - tom kelly

radical technological innovation seldom emerges by chasing users. “if Ernesto Gismondi and his Artemide team had gone into people’s homes to take pictures of how they use lamps, change bulbs, and turn lights on and off, they would have found better ways of changing bulbs and switching lights on and off. That is useful but not when companies are investing in radical innovation of meaning. - verganti

“for something this complicated, it’s really hard to design products by focus groups. A lot of times, people don’t know what they want until you show it to them”
- Steve Jobs on the iMac

people don’t know what they want.
they know what they know
ethnographic tools

level 2: observe

“stalking the user (legally)”

“go about, and constantly, as you go, observe, note and consider the circumstances and behavior of men... the actions of the bystanders who separate them or look on. and take note of them with slight strokes in a little book which you should always carry with you... for the forms, and positions of objects are so infinite that the memory is incapable of retaining them, wherefore keep these [sketches] as your guides and masters.
- leonardo da vinci
ethnographic tools

level 2: observe
Heisenberg uncertainty principle

sensors interfere with what they are trying to sense
ethnographic tools

level 2: observe
ethnographic tools
level 2: observe success stories

IDEO kids toothbrush design
ethnographic tools

level 2: observe success stories
ethnographic tools

level 3: experience

emersion
day in the life
shadowing

be the customer
“bodystorming”

empathy tools
thinking in experiences
level 3: (thinking about overall) experience
A storyboard is a series of panels that depict key scenes, actions, visuals, and annotations that define the highlights of a user experience.
ethnographic tools
level 3: experience fail

Annoying:
Removing your shoes, coat, laptop, and putting them into little plastic bins.

More annoying:
The feeling that you have to do this at a thousand miles per hour because of all the people behind you.

solving the wrong problem

the oatmeal
ethnographic tools
level 3: experience fail

what problems to do you foresee?

think through the use experience with bodystorming, storyboarding, or actual use!
voice of customer (VOC)
capturing customer's expectations, preferences and aversions through ethnographic research

Quality function deployment (QFD) is a method to help transform customer needs (the voice of the customer (VOC)) into engineering characteristics (and appropriate test methods) for a product or service.

This is for when you already have a problem and an existing product/solution.
assignment 3
part 1 - ethnographic research
read ethnography primer and IDEO Bootcamp Bootleg
assignment 3
part 2 - ethnographic research

the goal is to find problems.

focus on your team sub-theme

1) ASK: run at least three interviews with experts or potential users (don’t interview your roommate, your classmate, or your best friends)

2) OBSERVE: environments or people engaging in activities related to the theme

Take pictures (and video if appropriate)

Unpack and organize your research. List major insights

Craft three problems statements (not solutions or products yet).

Survey the market to see what exists already towards solving these problems. Note Pros and Cons.

Document your process and findings on your blog (legibly and thoughtfully)
<table>
<thead>
<tr>
<th>Assignment 3</th>
<th>Outline/Timeline</th>
<th>Blog Due</th>
<th>Peer Review Due</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>10/5</td>
<td>10/12</td>
<td>10/14</td>
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</tbody>
</table>

**Post Title: Research**

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask (Interviews)</td>
<td>3</td>
<td>1 point for each interview documentation. Interviews should not be with your close friends and family or with other students in the class. Documentation should include the questions you asked, a short summary of the person interviewed and why, and a summary of the conversation and 2-3 key quotes from the person. You should not use the interviewees full names on this public blog. 0 = No Documentation</td>
</tr>
<tr>
<td>Observation</td>
<td>1</td>
<td>Documentation with photos and a text summary of an observation of interactions related to the sub-theme. This portion should not involve the same people involved in the interviews. This should also not be an observation of yourself. Should include some quantitative and qualitative assessment. 0 = No Documentation</td>
</tr>
<tr>
<td>Unpacking</td>
<td>1</td>
<td>Visual and text description of your unpacking of the interviews and observation 0 = No Documentation</td>
</tr>
<tr>
<td>Major Insights</td>
<td>2</td>
<td>A listing of insights (at least 10) and a reference to where/who they came from (interviews, observations). These insights should be clearly based on your research. 0 = No listing of insights</td>
</tr>
<tr>
<td>Problem Statements</td>
<td>1</td>
<td>3 problem statements formatted in proposed style: “ ___ needs a way to ___ because ____ ” and are based on research from this assignment. Statements should not be solutions or ideas. 0 = No problem statements listed</td>
</tr>
<tr>
<td>Market Survey</td>
<td>1</td>
<td>A description and visual (if possible) of at least one current solution to each of your 3 chosen problems and the pros/cons. 0 = No Documentation</td>
</tr>
</tbody>
</table>
Site Visit
Target Headquarters

Product Design and Development
Thursday 4:00-5:00pm (come early if you can)

meet there, no buses
hosts: Mark Chase, Sarah Sheber, and Greg Vanbellinger
50 South 10th Street
19 min from east bank station
no photos, minimize bags and coats, you will carry it
have questions ready
questions!