brainstorming
blue sky
ideation
## third assignment

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<th>Outcome</th>
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<tr>
<td>Outline/Timeline Check</td>
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<tr>
<td><strong>Ask (interviews)</strong></td>
<td>3 = 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, photos from demonstrations and things they showed you, a summary of the conversation, and 3-5 key quotes from the person. You should not use the interviewees full names on this public blog. 0 = No Documentation</td>
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<td><strong>Observe (part 1)</strong></td>
<td>1 = Documentation with photos and a text summary of an observation of things and/or 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 or your things. This should include some quantitative and qualitative assessment. 0 = No Documentation</td>
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<td><strong>Observe (part 2) Market Survey</strong></td>
<td>1 = A description and visuals of the product landscape as you see it in three different market spaces (at least 2 must be in person). The purpose of this is to see trends, get inspiration, gain knowledge of the current product space. Your notes should reflect this. 0 = No Documentation</td>
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<td><strong>Unpacking</strong></td>
<td>1 = Visual and text description of your unpacking of the interviews and observation 0 = No Documentation</td>
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<td><strong>Major Insights</strong></td>
<td>1 = 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>
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<td><strong>Problem Statements</strong></td>
<td>1 = 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. The first blank can be a group and not an individual (e.g. “children need…”, “home cooks need…”, “people who have lots of shoes need…”), 0 = No problem statements listed</td>
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<td><strong>Instructor Evaluated Results</strong></td>
<td>Scaled out of 1 (in class)</td>
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third assignment
ask
third assignment

observe

Sock Habits
I asked respondents specifically how they folded their socks. I found myself more and more focusing on the socks and undergarment aspect of the accessory drawer. My interviews with end-users showed that they didn’t have anything else that they would put in that same drawer/section of clothing organization.
third assignment
observe
third assignment

Data collected from each country

- Japan: 50
- China: 45
- USA: 40
- India: 35
- Cambodia: 30
- Indonesia: 25
- Thailand: 20
- Malaysia: 15
- Australia: 10
- Britain: 5
- Germany: 5
- Guinea: 0
- Repu: 0
- Switzerland: 0
- France: 0
- Turkey: 0
- Canada: 0
- Russia: 0
- Egypt: 0
- Hungary: 0
- Jordan: 0
- Myanmar: 0
- Pakistan: 0
- Saudi Arabia: 0
- Tunisia: 0
third assignment
observe

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*Note: The table includes various items and notes, but specific details are not clear from the image.*
third assignment
product landscape
third assignment
unpack
third assignment
unpack
third assignment

suggest three needs, opportunities or problems not product ideas
“try to use the problem statement format USER needs a way to _____ because _______”
The mere formulation of a problem is far more essential than its solution - Einstein
The ability to ask the right question is more than half the battle of finding the answer - Thomas J. Watson

from your problem statement to how might we...

how might we make washing dishes more fun?
Participant 1 needs a way to make washing dishes more fun, because she finds it so boring that she avoids using dishes in the first place.

how might we keep toothbrushes clean while traveling?
Dr. Bill, an orthodontist, needs a way to keep his traveling brush clean because it gets moldy inside its carrying container.

how might we display spices without exposing them to light?
Bill (a spice store employee) needs a way to store spices in light proof jars while being able to see the spices because light deteriorates the flavor of spices.

how might we easily and effectively dry wine glasses?
Jane, a 45-year-old mother with 1 child in college, needs a way to dry her wine glasses without getting water spots, breaking the glass, or cutting herself.

how might we quickly carry drinks without spilling or dropping?
Therese Olinger, an 18 year-old server at Red Lobster needs a way to serve drinks more easily because balancing a tray can be difficult when it is busy.
framing the prompt
highly constrained - minimal room for play/creativity

more ergonomic
more features
more portable
fun shapes
customizable

how might we make the computer mouse more fun/ergonomic/interactive/portable/etc?
framing the prompt

less constrained - more room for play/innovation

Progressive Revelation
VanGundy, 1981

how might we change the way we interact/interface with computers/electronics?
prompts
ill structured (free form, blue sky) vs. structured
types of ideation

Free Form
or Intuitive Methods

- GROUP WRITING:
  - BRAIN WRITING
  - BRAIN SKETCHING
  - COLLECTIVE NOTEBOOK
  - PIN CARDS
  - KJ METHOD
  - TRIGGER SESSIONS

- Free Writing

- BRAINSTORMING

- ROLESTORMING
  - 6 THINKING HATS
  - SUPER HEROES
  - DISNEY METHOD

- LATERAL THINKING
  - CHALLENGING ASSUMPTIONS
  - BOUNDARY RELAX
  - NEGATIVE BRAINSTORM
  - REVERSAL
  - EXAGGERATION

- PROGRESSIVE REVELATION
- LADDERING

Structured
or Logical Methods

- MORPHOLOGICAL ANALYSIS
- ATTRIBUTE LISTING
- POTENTIAL PROBLEM ANALYSIS

- TRIZ
- ARIZ
- ASIT
- SCAMPER

- MIND MAPPING
- FREE ASSOCIATION
- ASSOCIATION MAPPING

- Associations
- techniques

- PROVOCATIONS
- BUNCHES of BANANAS
- EXCURSIONS

- BRUTE THINK ANALOGIES
- FORCE FIT
- FOCAL OBJECTS

- NEW PERSPECTIVES
- techniques

- LATERAL THINKING
- CHALLENGING ASSUMPTIONS
- BOUNDARY RELAX
- NEGATIVE BRAINSTORM
- REVERSAL
- EXAGGERATION

- PROGRESSIVE REVELATION
- LADDERING
types of ideation
brainstorming
different points of view
to generate LOTS of Ideas....
quickly.
brainstorming

problem statement
5-9 people
20-40 minutes
room/situation
1 facilitator and lots of paper

Bounded Ideation Theory
brainstorming

"In short: there are no rules. And here they are."
— Scott McCloud, Making Comics.

I. Defer Judgement. NO EVALUATION

people become self conscious

silly ideas are good

If at first, the idea is not absurd, then there is no hope for it.
— Albert Einstein

evaluate later

evaluation = left brain
creativity = right brain
Switch Left Brain to Silent Mode
brainstorming

"In short: there are no rules. And here they are."
— Scott Mc Cloud, Making Comics.

1. Defer Judgement.
   NO EVALUATION

2. Build on ideas
improv warmup

36% more ideas!

bonding
playing
comforting
lowering inhibitions

listening
making associations
manipulating ideas
building on ideas
going for quantity
deferring judgement
encourage wild ideas

kudrowitz and wallace, 2010
zip zap zop
listening.
being ready to act.
word ball
listening.
being ready to act.
making associations
story spine
listening.
defer judgement
build on ideas.
(yes and)

once upon a time...
and everyday...
until one day...
and because of that...
and because of that...
and ever since that day...
look at me!
manipulating an idea.

“Discovery consists in seeing what everyone else has seen and thinking what no one else has thought.”
-Albert Szent-Gyorgyi
brainstorm sketching

Quick and Clear

Draw Big and Bold

Title

Brief Pitch

Mount it

Repeat

FART DARTS

one idea/page
brainstorm!

how might we...

design vegetables to be more appealing to children in stores

Defer Judgement

Build on ideas

Draw/title every idea

Go for quantity

let me know if you run out of paper (or marker ink)
brainstorming assistance

dopamine

- Mania, psychosis
- Normal
- ABN temporal activity: facede, loose speech & ideas
- Depression, blocks
- Goal-directed behavior
- Slow action, emotion, thought
- ABN frontal activity: halting, rigid thought, depression

alice flaherty
rolestorming

1. ideas come from outside the norm
2. creates a playful atmosphere
3. comfort in saying the unusual

empathy + pretend play

child, grandparent, one of your parents, healthcare professional, teacher, athlete, dog or cat, circus performer, musician, chef, construction worker, soldier, wheelchair user

superheroes and fictional figures
(extreme personalities + wish-fulfillment)

Superman, the Incredible Hulk, Batman, Spiderman, Ironman
James Bond, Sherlock Holmes, Indiana Jones, Harry Potter,
Darth Vader, Mickey Mouse, MacGyver
negative brainstorming
problem reversal
brute think
random words

tongue plastic wrench star gourmet money flashlight dice windsurfer ribbon camera can pencil pin watermelon soda tape necklace mould gutter jewel house gully dot fuel music wastebasket x-ray cup paint lamb stomach rain pumpkin telescope knee pole champagne top beans angel student lips salmon lungs gasoline tub fox chin chimney bikini prison tax igloo bird fireplace axe smoke referee ball cork stream rib strip jellyfish vines bomb umbrella cone flood frog table flower towel window locker toy podium saucer rainbow amoeba disk snail rice grass fence horse shed leaves

associative theory of creativity
props
random objects

“newsstand roundup”
ipm (pp)

Ideas Per Minute (Per Person)

quantity

>1.0 ipm (pp)

7 people,
30 min = 210 ideas
sorting ideas

KJ-Method, Snowball Technique, or Affinity Diagrams

not selecting ideas yet!

look for trends for further research, interpreting the mess, reviewing the ideas again

the silent treatment

choose appropriate names and number of groups

Big Toys

Good Ones

starts with “R”

Funny Ideas
sorting ideas
KJ-Method, Snowball Technique, or Affinity Diagrams
multi-voting

White Dots - most interesting ideas?

Orange Dots - most creative ideas?
sorting ideas

KJ-Method, Snowball Technique, or Affinity Diagrams

instructors photograph the wall
leave all of the ideas
don’t remove dots
note: index cards alternative
sorting ideas
free Post-it note App
brainstorming
productivity loss factors

production blocking  evaluation apprehension  free riding

come in with ideas  nominal brainstorming
assignment 4  
blue sky ideation

outline/timeline/qualtrics due 10/18
blog due 10/25
peer review due 10/27

post title: brainstorm

you are facilitating/hosting an idea generation session
like the one we did today in class but there is more…
# Assignment 4

## Blue Sky Ideation

<table>
<thead>
<tr>
<th>Outline/Timeline Check</th>
<th>1 point if completed on time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Idea Generation</strong></td>
<td>3 = Craft a How Might We Statement based on your top problem/opportunity. You will use this statement throughout this assignment. Write that statement at the top of this section. <strong>Before conducting any group brainstorming session</strong>, you should <strong>individually</strong> spend several hours (not at one time) thinking of ideas for your problem/opportunity and sketching them. All ideas here should be visual with titles. These ideas can be rough doodles and there can be many on a page. You should fill several pages with these ideas. There should be at least 30 different ideas here. <strong>This may be the most important part of all assignments in this class.</strong> Include scans of all the pages from your notebook. 0 = No Documentation</td>
</tr>
<tr>
<td><strong>New Warm-Up Game</strong></td>
<td>1 = Description with photo/image of your new type of warm-up activity. &quot;New&quot; meaning you <strong>developed the activity</strong> and not simply tried something new. In addition to the activity you develop, you are encouraged to also use warm-up games you learned in class. 0 = No Documentation</td>
</tr>
<tr>
<td><strong>Session Organization</strong></td>
<td>1 = Photo documentation that you organized a group of at least 4 people with relatively different backgrounds (not including yourself, not including people from this class) supplemented with a short description of the participants, the setting, the warm-up games used, the length of time of dedicated idea generation (20-40 min), the total number of ideas generated and the IPM for the session. You should follow the process we taught in class. You should tell all participants the prompt a day in advance and ask them to come in to the session with ideas. During this session, you should introduce your own ideas from beforehand and add them to the pool of ideas using whatever medium (e.g. post it notes) the group is using so they can be voted on with the new ideas 0 = No Documentation</td>
</tr>
<tr>
<td><strong>Sorting and Voting</strong></td>
<td>1 = Photo of the ideas sorted into categories showing the results of a multi-voting processes. A textual description that includes the category names and the process you used in the multi-voting. 0 = No Documentation</td>
</tr>
<tr>
<td><strong>Top Ideas</strong></td>
<td>2 = Re-sketch and scan the 10 best ideas from this session so all ideas are legible and in the same handwriting. You should determine the “best” ideas based on the client’s needs/interest and whatever criteria you deem important. You are welcome to take into account the results of the multi-voting when selecting ideas. Each idea should be a separate image with a title and credit to the person who came up with the idea. These top 10 can come from your individual ideation session or the group session. You will bring these 10 physical pages into team discussion. 0 = No Ideas</td>
</tr>
<tr>
<td><strong>Peer Evaluated Ideas</strong></td>
<td>Scaled out of 1 (in class)</td>
</tr>
</tbody>
</table>
mid term grades

40.5 - total points so far
schedule

Thursday - Alternative Team Ideation Methods
Tuesday - Worrell vs. Kablooe
questions!