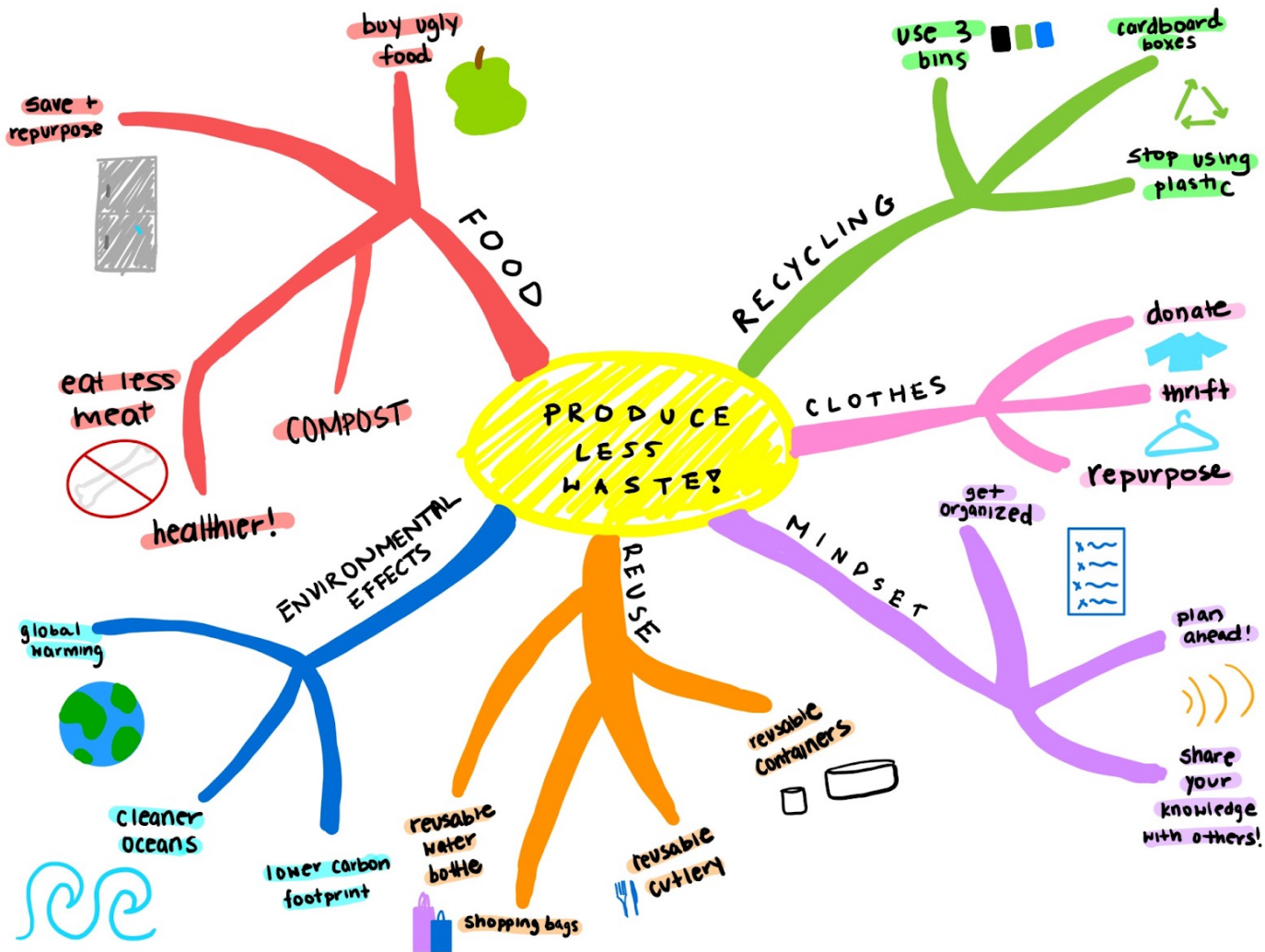


# Ideation Strategies

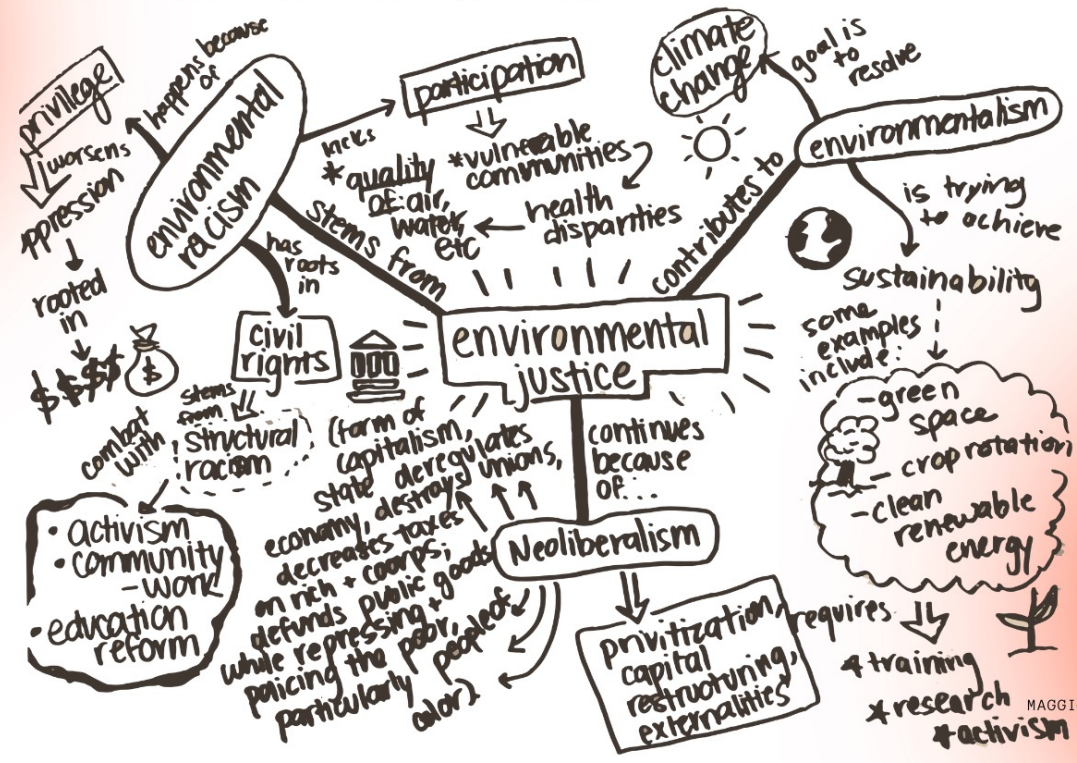


 = fantastic!



# MINDMAPPING

03 / 07

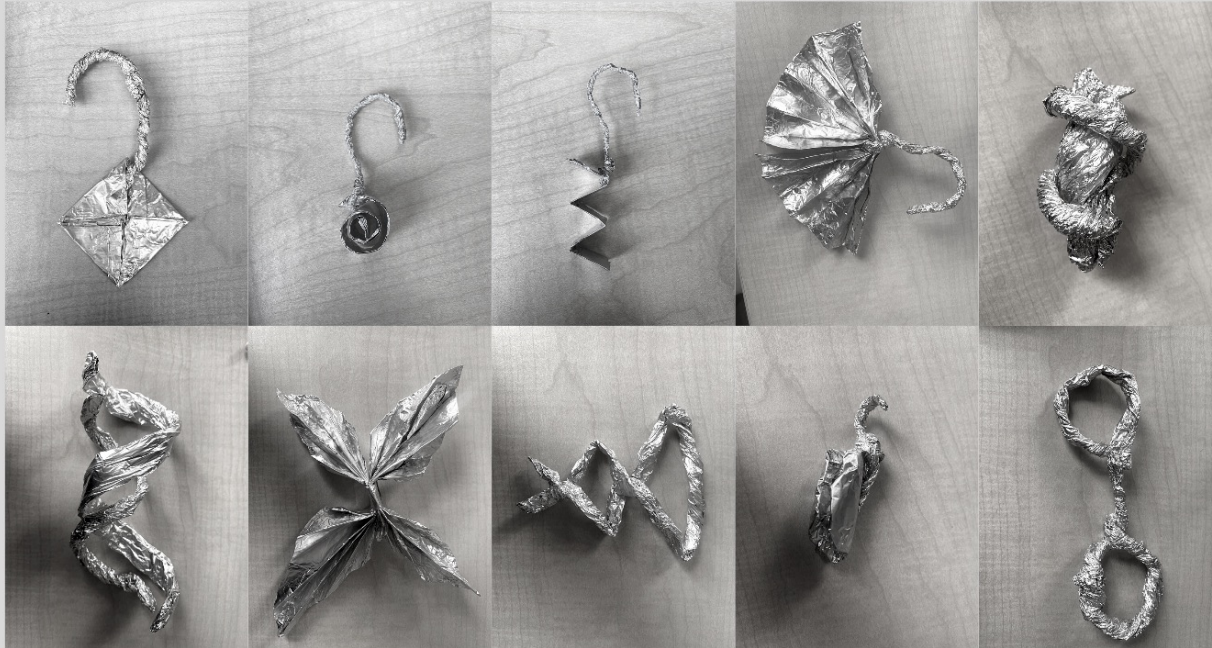


MAGGIE MEISTER | DEA 2730

02



- collapsing
- folding
- expanding
- origami-esque



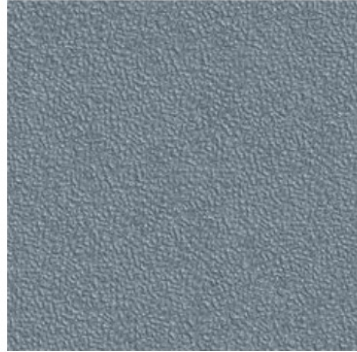
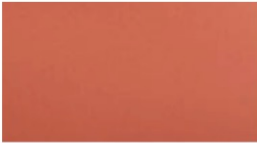
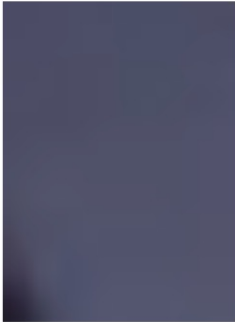
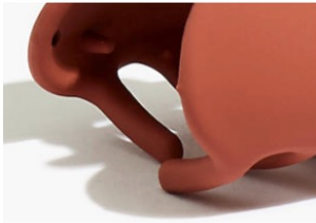
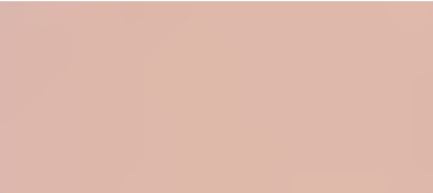
# PROTOTYPING

---

# RAPID PROTOTYPING



# MOODBOARDING







05  
—



# INTERVIEW FINDINGS

Questions:	Participant 1:	Participant 2:	Participant 3:	Participant 4:	Participant 5:
In which way do you think you contribute to climate change the most? Use of transportation, Food, Energy, or Generating Waste	Use of transportation	I think factories/nuclear plants that produce smog contribute to climate change the most	Food	Food	Energy
Has there ever been a moment where you felt more conscious about climate change? If there was, what caused that or what brought you more awareness?	I don't really actively think about it everyday, but when its brought up (thru conversations, news, etc.), it definitely makes me more aware.	There has been when I would see that the rivers from my hometown as a kid were full, but now when I'm older I see a lot of stuff like dried up lakes/rivers.	Whenever it is brought to my attention through media (social media, news, etc)	One day I only used disposable containers in the dining hall and I collected all of the trash in one spot for the day. I was appalled by how much trash I could accumulate in just one day so from then on I decided to never use a disposable container in the dining hall and I always bring the green one instead.	Yes, because I studied meteorology
5.What do you think about visual displays or installations in public?	I'm chill with them I think. I don't think they are necessary, but some have importance I suppose but I don't really like super care.	I enjoy seeing visual displays and like art in general	They're cool i guess	I like visual displays depending on how it is done.	I notice them and read them, but usually are not influenced about them

# INTERVIEW FINDINGS

Questions:	Participant 1:	Participant 2:	Participant 3:	Participant 4:	Participant 5:
How often do you think about climate change?	Once a week	Once a month	Once a month	Multiple Times a Week	Never
How often do you do something that would help climate change?	Once or twice a week	Once or twice a week	Everyday	Everyday	Couple of times a month
Rank these climate change impacts from most to least urgent: a. Extreme weather, b. Increased drought, c. Rising ocean, d. Less of life and biodiversity, e. Not enough food or resources, f. Increased poverty and health risks	f. increased poverty and health risks e. not enough food or resources d. less of life and biodiversity b. increased drought c. rising ocean a. extreme weather	a. extreme weather c. rising ocean b. increased drought d. less of life and biodiversity e. not enough food or resources f. increased poverty and health risks	b. increased drought e. not enough food or resources f. increased poverty and health risks a. extreme weather c. rising ocean d. less of life and biodiversity	d. less of life and biodiversity e. not enough food or resources f. increased poverty and health risks a. extreme weather b. increased drought c. rising ocean	b. increased drought d. less of life and biodiversity c. rising ocean e. not enough food or resources a. extreme weather f. increased poverty and health risks

### Survey questions:

1. What do you think about climate change? (how severe of a problem is it)
1. What do you think is the most critical issue that leads to climate change?
1. Would you be a participant in spreading the message of saving the planet? (Would you be willing to appeal the message to people in public?)
1. Would you be willing to have your personal carbon footprint calculated and displayed to the public (by choice)?
1. If you were to put on an accessory to have your carbon footprint displayed to the public, where would you have it be? (Which part of body?)
1. Would you mind if the accessory creates light/noise when you interact with it?

## 03 INTERVIEWS

### P1(Mr. M)

1. A real problem
2. Global emission of greenhouse gasses
3. Not willing to do public stunts.
4. No.
5. Arm
6. No

### P2(Mr. L)

1. Pretty serious
2. Energy/resource waste
3. Ok if not too much effort/public demonstration is needed
4. Yes
5. Upper body
6. Yes.

### P3(Ms. K)

1. An imminent problem that needs to be addressed
2. Greenhouse gasses from industries (to keep cost low, not eco-friendly means of production are widely implemented)
3. Sure.
4. I don't want too much of my privacy displayed.
5. Side of body(arm/waist/leg)
6. No.

### P4(Mrs. C)

1. Serious problem.
2. Pollution(carbon emission and acidic substance emission) from chemical productions
3. Of course and I am one now (recycle, low VOC solutions, and bio-based)
4. No.
5. On my phone(basically a part of my body).
6. Ok if not too disturbing.

### P5(Mr. W)

1. A growing problem
2. Wasteful habits of people and general ignorance to the importance of the environment and how little time we have.
3. Ok if it's something I can do in my spare time.
4. If I can choose when, how long, and how detailed the information is going to be
5. Wrist, arm
6. I want to have an option to turn it off.



## TRANSPORTATION ACTIVITY BOOK



What type of transportation apps  
do you use? Write a list here:

Ithaca Transit  
Google Maps  
Uber  
Lyft

How much do you think your  
commute cost (or save society)?

if driving costs  
you \$1 Society pays 10

if bussing  
costs you \$1 Society pays 5

if biking costs  
you \$1 Society pays 0

if walking  
costs you \$1 Society pays 0

When at home, which forms of transportation do you  
mostly use? Place the star stickers based on the  
frequency. (Not counting college since we mostly walk)



Blue = Everyday  
Green = Multiple times a week  
Yellow = Few times a month  
Purple = Few times a year to never

Use the following link to come up with a future  
hypothetical commute that you think might be  
realistic to your job in the future:

[bit.ly/1ardcommute](https://bit.ly/1ardcommute)

Which modes of transportation did you use?  
walking, train, bus, car

How long did your commute take?  
30 min

How much did your commute cost?  
\$5

When did you start working, and when do you expect  
to retire? 22 - start working,  
50 - retire

What was your final result? (awful, good)  
Average

How much time and money would you spend total  
commuting?  
30 min, \$5/week

Other comments

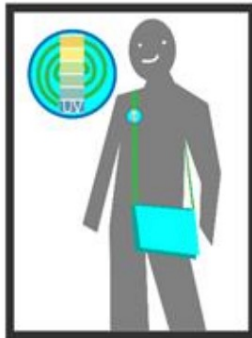
How many pounds of CO2 are emitted per passenger  
per mile? Without looking up the answer, draw an  
estimated bar per mode of transportation.



# 02

# CULTURAL PROBE

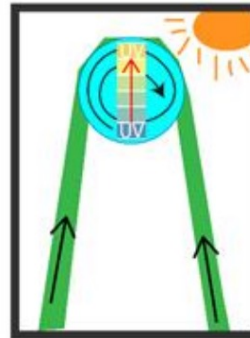




Dea is excited about his new bag that has self-adjustable straps. The straps will lengthen or shorten in response to UV levels.



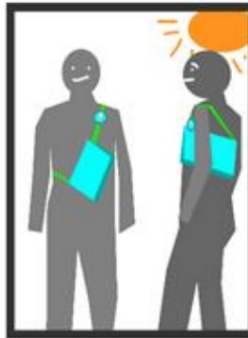
Dea goes outside and starts to walk towards sunlight.



The UV sensor detects high level of UV and the motor begins winding the straps inward.



The usable strap part becomes shorter when there are high levels of UV.



Dea now wears the bag differently compared with when the straps are long.



The straps lengthen again when there's normal level of UV detected.

07



# INTERVIEWS

# Coding (i.e. analysis)!

Participant	Observation Summary	Code
1	Middle-aged person sitting at countertop. Posture is hunched over. Exhausted look, tired facial expressions, emotional distress. Does not interact with any object on table (snacks, writing pad, phone). Head is in palm, contemplating, looking off into the distance.	DISTRESS MOTIVATION INTERACTION
2	Teenager, sitting at desk to complete homework. Rocking back and forth in chair, fidgets with legs. Posture deteriorates during task. Facial expressions are indifferent. Lack of motivation, very aware of the clock.	MOTIVATION POSTURE DIVERSION CONCENTRATION
3	Older person performing task (washing dishes). Has difficulty gripping heavy objects, posture is stiff, hunched over. Tired expression on face, lack of motivation, physically stressed. Refuses to take a break.	MOTIVATION MOBILITY POSTURE
4	Disabled, older person, sitting in bed. No access to sunlight. Limited human interaction. Cannot move left side. Facial expressions indifferent, depressed look. Makes audible sounds of complaining, difficulty speaking.	COGNITION MOBILITY INTERACTION DISTRESS
5	Young child sits to do homework, has trouble concentrating on task (phonics). Does not smile during this task, shakes leg, makes audible sounds of distress and whining. Asks guardian if they can leave the table several times.	DIVERSION CONCENTRATION





# Yes! Quotes!

## INTERVIEW

“It’s an easier way to be in touch than texting or calling because personally...I think a lot before I text and I really don’t like calling, it just makes me nervous.” - 19 years old

“I would not want the lamp to feel robotic. Since it will be integrated into my home, I would like it to be warm and personal, so I would not want a vibrating or rotating thing or a robot’s voice. I would either want a musical sound or a smooth showing of a name or picture.” - 20 years old

“It will help me to talk to [my friends] in an easy way, and it’s cool.” - 14 years old

“Probably wouldn’t use with my immediate family; more likely to use with people I am not in touch with daily” - 19 years old

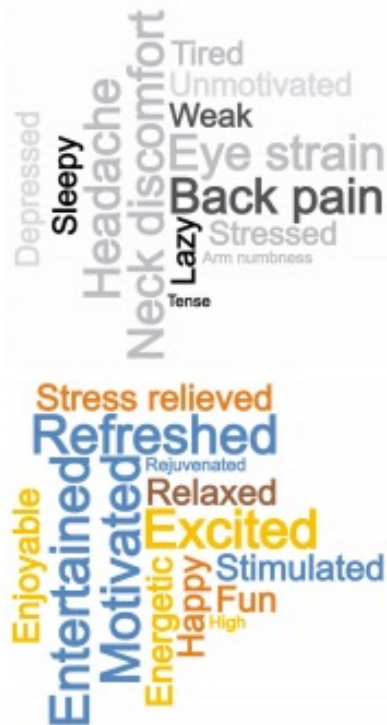
“You could be in your car and send a message in your car. If you’re limited to physically pushing the lamp itself, you have to physically be in that location...it’s easier with technology [an app]” - 80 years old

“Otherwise,, you have no connection. It’s great that you can connect to multiple people at the same time” - 80 years old

# Yes! Quotes, Analysis, Fun!

## 11 Interview (Continued)

👉 Participants' problems due to prolonged sitting time



👉 Participants' feelings imagining they are playing with the device

👉 Quotations from the interview that I find the most helpful



CJ

From the video it looks like the 'Hit the Lights' game stops before the song ends. I think that would piss me off I hope I can play until the song finishes.



RC

I may not play the 'Hit the Lights' game every time it asks me because if I'm in the middle of working on an emergent due, I won't be patient enough to play the game. But I think walking to the device and turning it off regularly helps me form a good habit.



MY

I think this device is multifunctional and it can be shared between family members. Little kids may find the game very interesting, while parents may think the timer feature extremely helpful.



CH


Wow, the game looks very exciting and energetic! I'm unsure if I can always get back to the working mood after I play with the device. I hope it can also have a "meditation mode" for me to just calmly relax and temporarily get away from my work.



HY

I'm not sure if the device can release my eye strain because the lights are very colorful and shiny! I agree with CH that it may help if the device can have a "meditation mode" that leads you to calm down and relax eyes.





## Interview: questions



1. Do you find yourself in long periods of sitting for long periods of time without stretching? If so, where do you sit the most and what are doing while sitting?
2. Do you sometimes find yourself suffering physical discomfort after a long day of working? If so, describe the discomfort(s).
3. How many hours of exercise do you do a week? What kind of exercises are they?
4. What do you think of the product? How do you think it works?
5. Would you find the product helpful? Why or why not.
6. Do you think the noise feature would be too distracting while you are working?
7. Do you think you would prefer reminder method other than sound, such as light-up or pop-up? Why?
8. What is something that you think the product can improve on?

\*the prototype presented had noise alarm.



## (Interview: answers)

Q#	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
1.	Yes. On the couch, doing studio work and writing paper, usually over 5 hr.	Yes. At my desk, programming and doing homework.	Yes, I take every opportunity to sit and lie down, usually working on my computer.	Yes. Sitting for long periods, usually getting up once an hour.	Yes. At my desk, doing homework.
2.	Back pains, stiff neck, leg discomfort.	Back pain, eye fatigue.	Back pains, shoulder pains, muscle soreness.	Back pains (even after 1 hr of sitting), arm pains).	Back pains, shoulder pains, eye fatigue.
3.	2-4 hrs of dancing routines.	Little to no exercise since school started.	Gym routines for 5-6 hrs.	Stretching when there's back pain.	When I'm not busy, 4-5 times of 30 min cardio.
4.	A cushion that times sitting time.	A cushion alarm.	A sitting pad that makes us get up once every 30 min.	A sitting pad with sound reminders.	A cushion that detects when one sits on it and times sitting period.
5.	I think the product would be helpful. I like how it is more forceful than regular alarms.	I think the product will be helpful since it really makes me stand-up.	I think it will work, but I think noise might be a bit disruptive.	I think the product will definitely help.	I am not sure. What if I just sit down somewhere else or sit down right away.





## Interview: conclusion

- I. Most of the participants think **the product will be helpful**, and most of the participants do not have sufficient weekly exercise.
- II. The participants feel that the reminder would be **most effective if it were in a tactile form**, and forcing them to get up by making sitting **uncomfortable**.
  - Suggested forms: message pad-like bumped surface, temperature change
- III. Some **design opportunities**:
  - “Do not disturb” feature
  - Time the stretching period to ensure sufficient stretching
  - Play different music/stretching routine to guide the user
  - Consider intervals of reminder, perhaps increasing gradually
  - Attachment to the chair



Some great work here.

(Some great work not shown here.)

Learn from these “great teachers”!

A few things:

- not enough analysis (coding Interviews)
- not enough results (Cultural Probe)
- GIFs don't work in slides I received (figure out how to do it)
- Someone sent me not a file but a link, that didn't work.
- Some moodboards didn't have moods (colors, textures, materials) – instead, they had objects and forms.