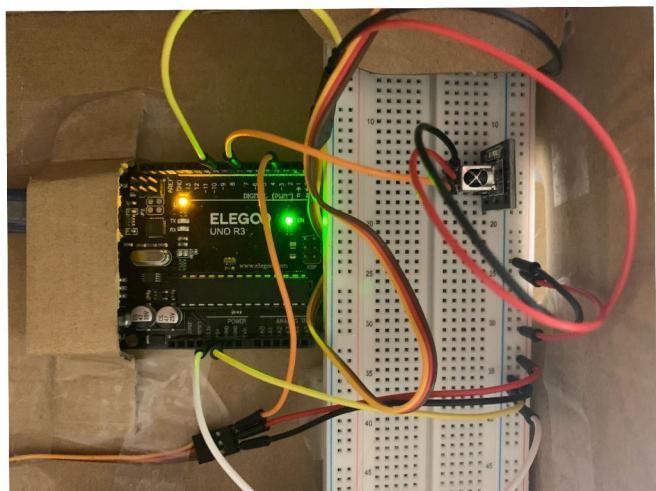
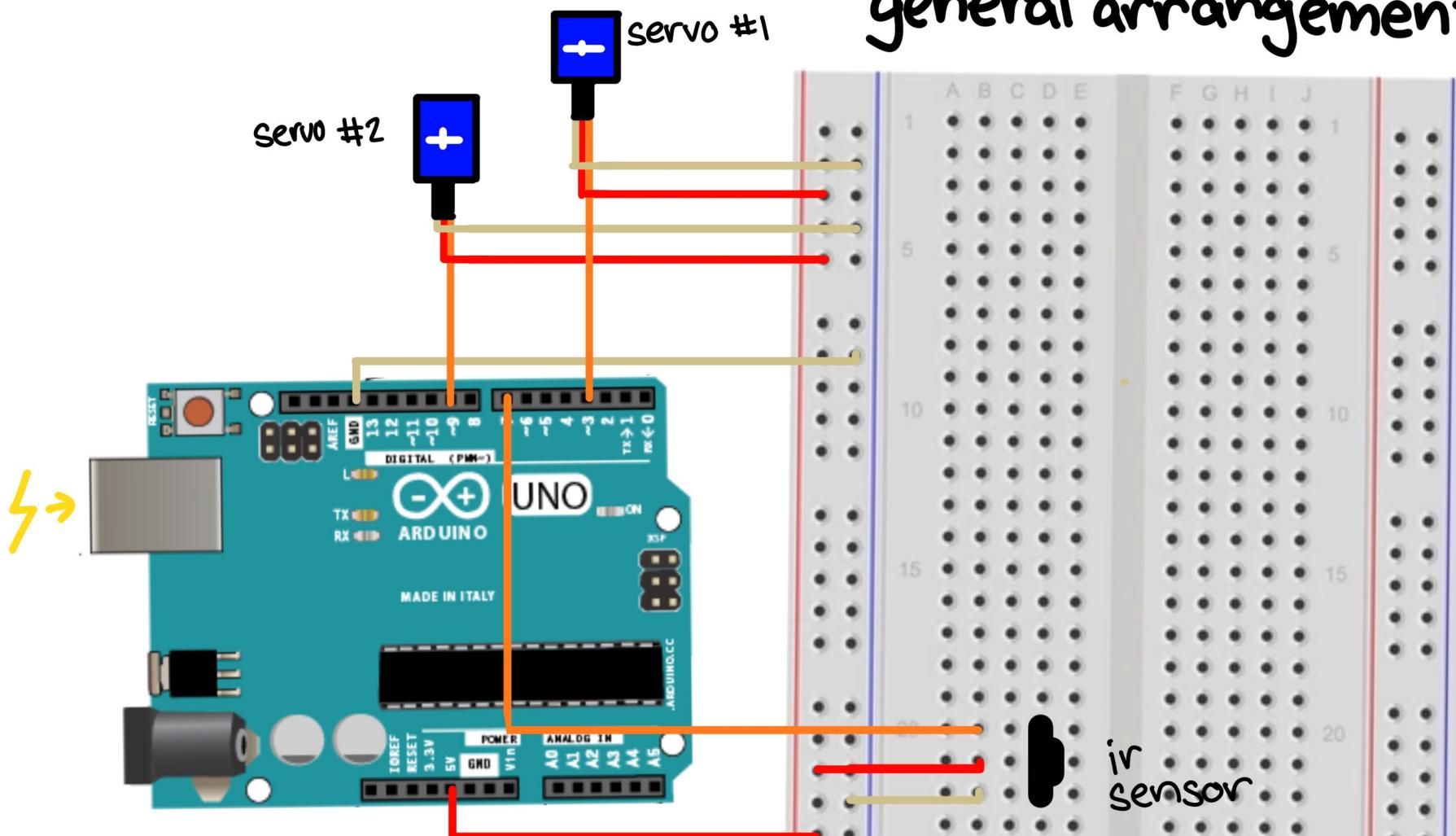
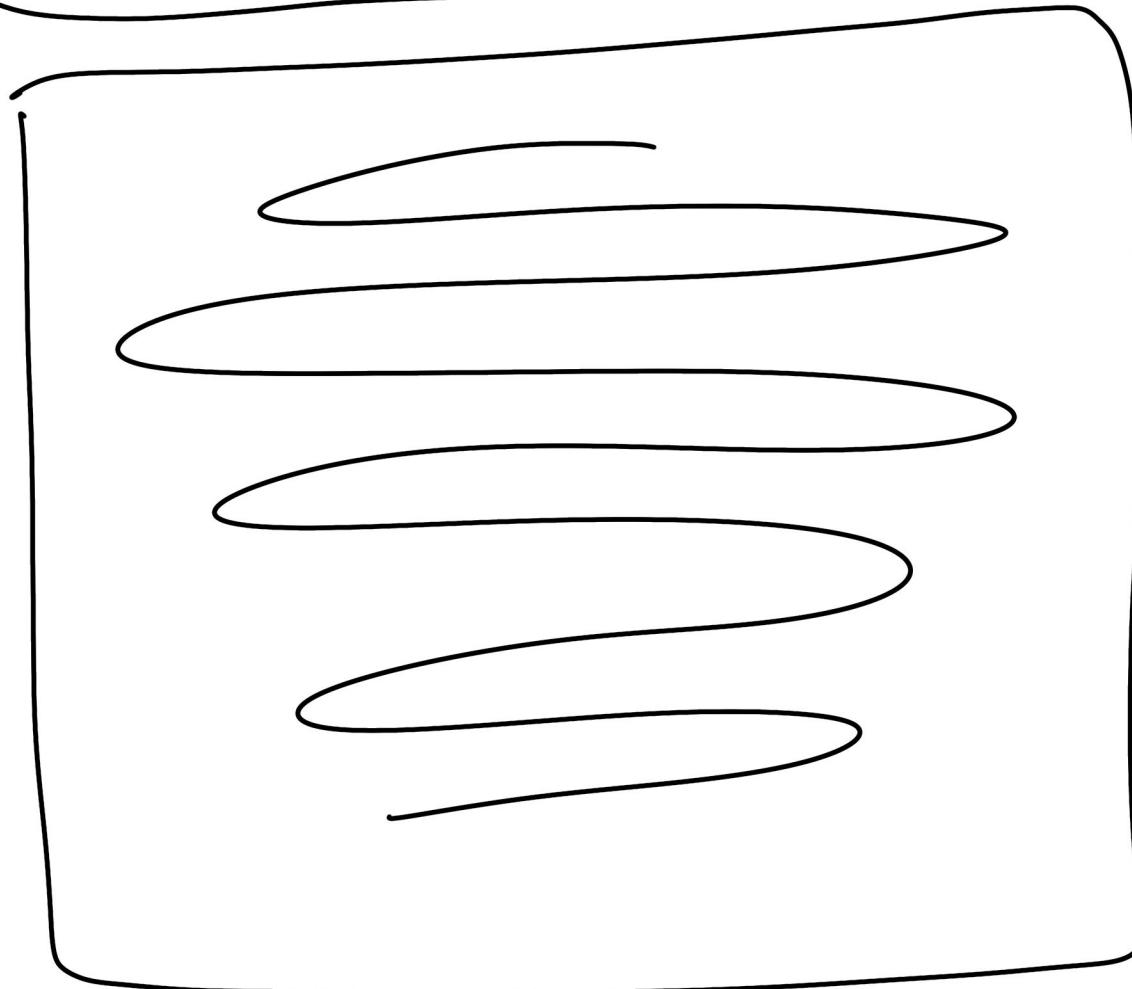
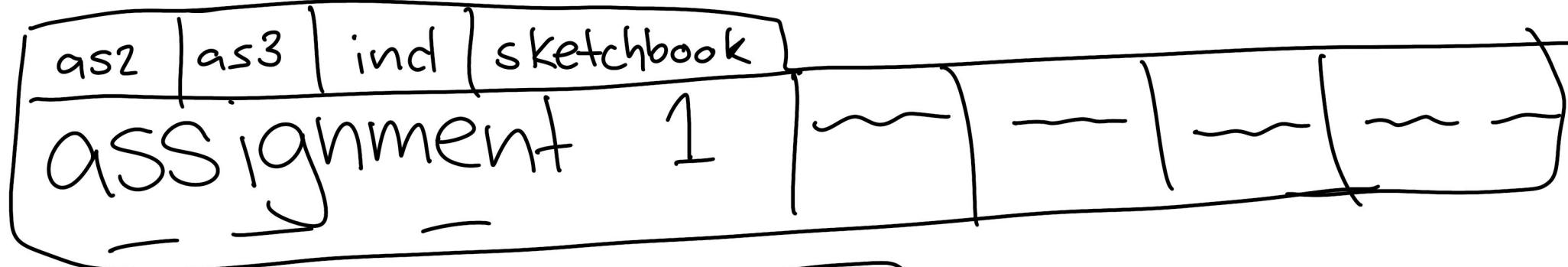


# general arrangement



~ Caitlin McConnery  
30118518

CPSC 581

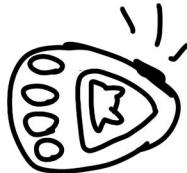


Monday December 2

for adulting helps you be a responsible adult

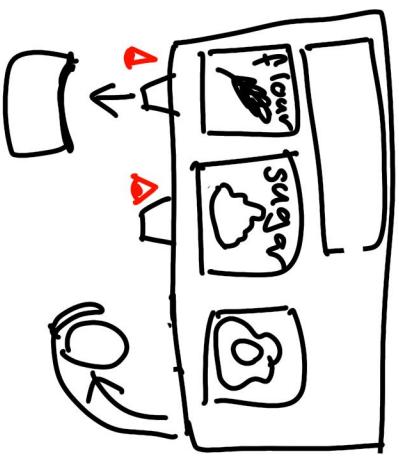


spritzes you  
if you snooze alarm  
watches you keep snoozing



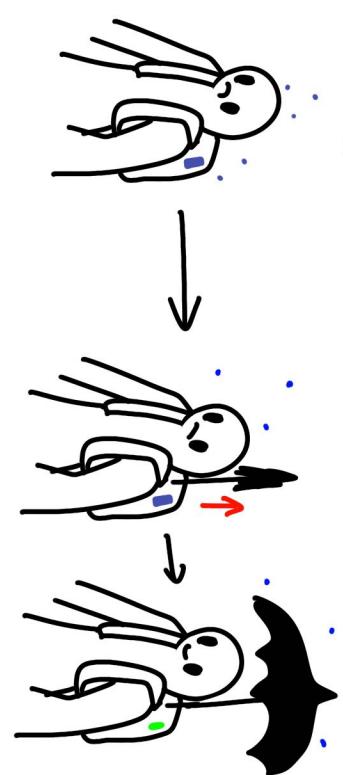
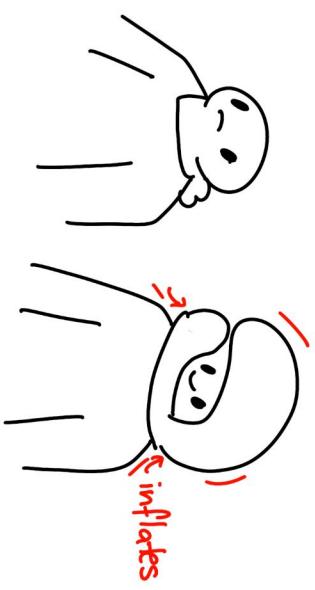
tamagotchi:  
take photo  
of completed  
task take  
care of beast

cooking assistant for little kids (<5)

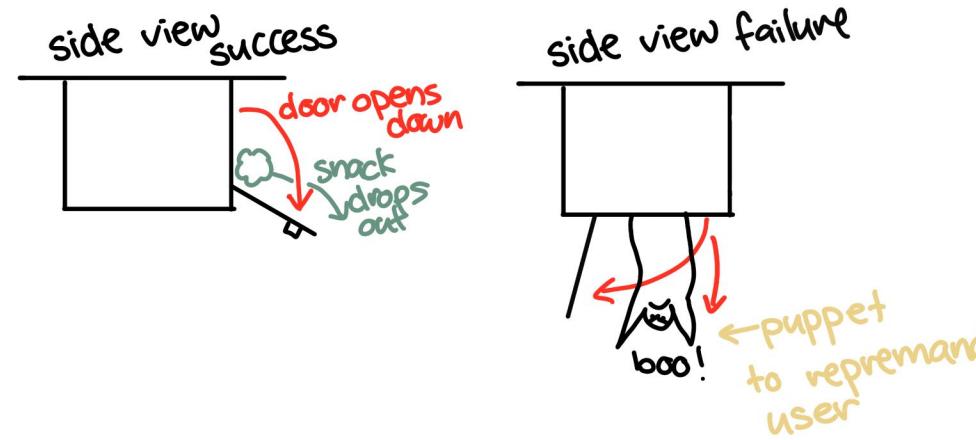
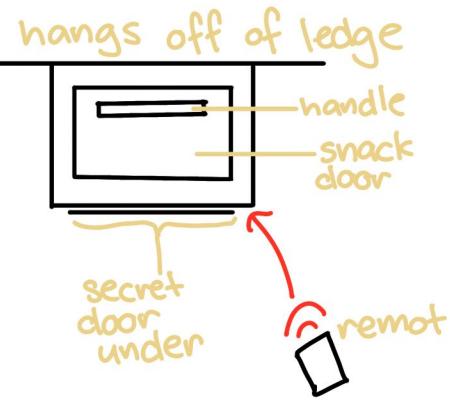


dispenses items they need in amounts to stir

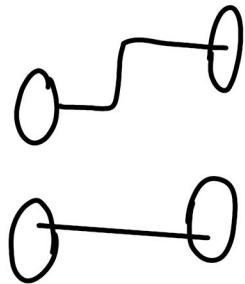
design smart umbrella



November 28



or two doors on bottom



November 25<sup>th</sup> Monday Lecture

## Project

states

unlocked

- ↳ LED 1 lit
- ↳ wait for lock request

locking

- ↳ LED 1 not lit
- ↳ move into locked position
- ↳ set state lock

locked

- ↳ if in restricted time
- light LED 2
- ↳ wait for unlock request
- ↳ if request fails flash LED 1

unlocking

- ↳ move to unlocked position
- ↳ set state unlocked



Jack  
in a box

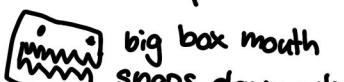
gate #1 opens door to snack  
gate #2 opens jack in the box

needs more creativity

vending machine

healthy, yummy and trash despence

mouse trap



big box mouth

snares down when unauthorized

Thursday November 21

Project 3

more ideas

insulin reminder for pets

pet needs insulin every 12 hrs

insulin runs out every 30 days

- ① one light turns on every 12 hours  
↳ to turn off light, dispose of needle

- ② 3 lights  
green lit for first 50 injections (25 days)

yellow lit during 26-28 days indicating to call for refill soon

red lit during 29-30 days or when yellow and it's friday



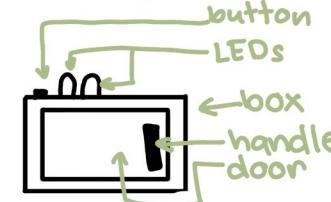
reminder board

0000 insulin  
000 medication

Friday November 22

project 3

snack protector designs



button = password entry

LED #1 = on for unlocked

↳ flash for fail

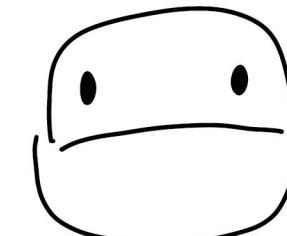
LED #2 = on for not-accessible (during meal periods)

box w door to encase snacks inside box:

servo arm blocks door from opening rotates 90° when unlocked successfully

works like a gate latch

or



what problem does it solve?

1. stops food thefts
2. stops user from snacking at meal time

states [locked, unlocking, unlocked locking, failedunlock]

needs more creativity

Terrence example:

have it slap you on a failed attempt

maybe have it be like a mousetrap

door opens but you cannot see inside, if you don't have permission you get slimed

expired food if wrong

or maybe like vending machine

or maybe ingredient combiner

put bowl in, dispenses dry ingredients and stirs

Nov 19 2024 - Group Project #3

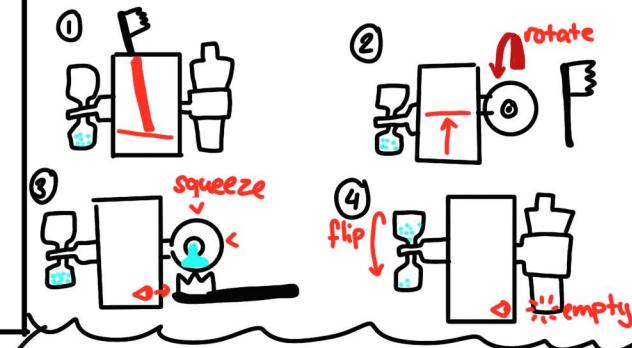
Create a physical prototype to solve an everyday problem

Requires:

- 1 sensor input

- 1 physical output

- make it look nice



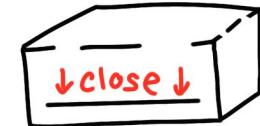
Problem ideas:

- keeping hydrated → medication reminder
- going to bed
- procrastination
  - ↳ using phone while charging
  - ↳ doom scrolling in morning
  - ↳ phone lock alarm clock
- book holder page flipper
- Smart timer/hourglass
- teeth brush reminder
- snack protector
- door lock reminder

snack locker

- ↳ protect snacks from roommates
- ↳ hault snacking before meals or overeating
- ↳ reminders/expirations
- \* how detect it's right person?

1. input button sequence to unlock 2. motor locks/unlocks/opens door 3. detects return of snacks



close when phone inside until charged or some unlock requirement

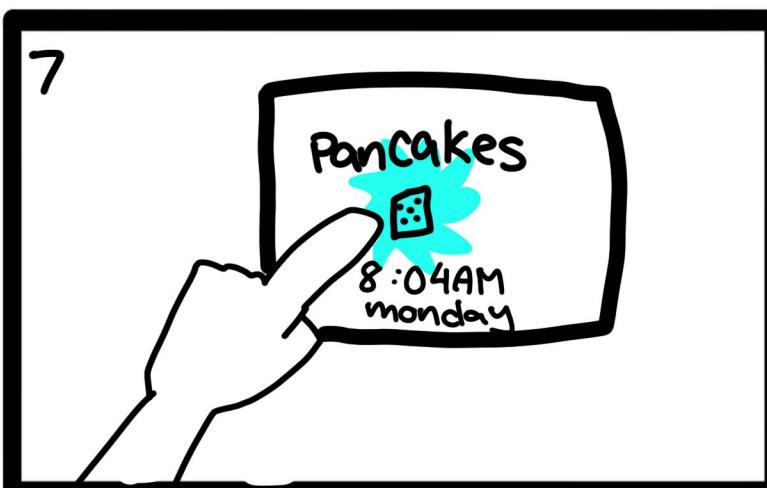
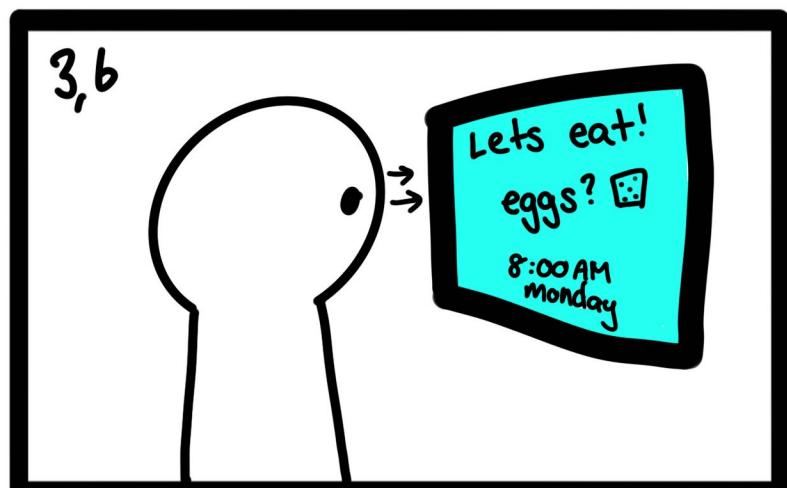
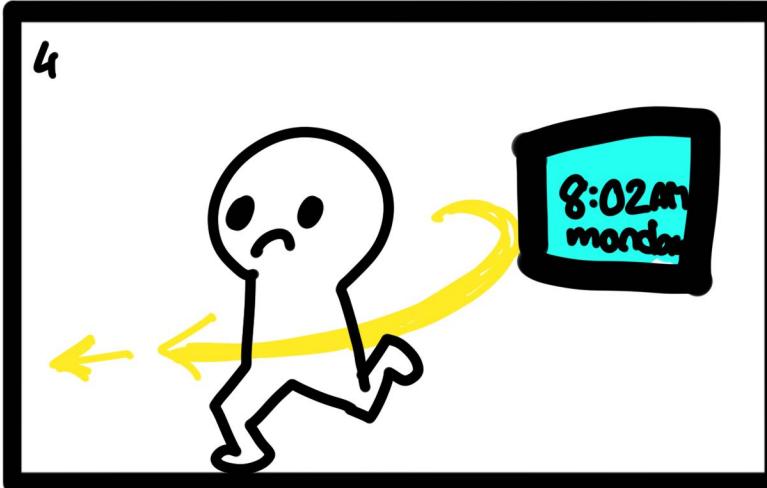


pill bottle on pressure plate, bell jingles when user passes if not taken on schedule

snack zipline?

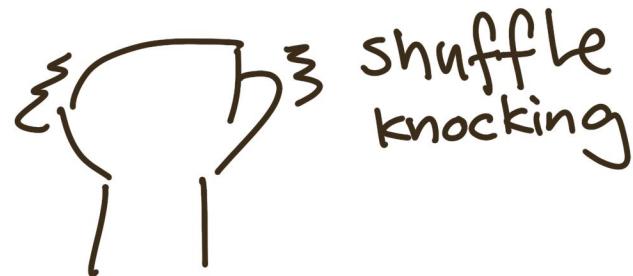
potential  
input/  
outputs

- lights - indicate availability/unlock state
- microservo - unlatch door
- button - unlock sequence input
- remote - input
- text display



# microgestures for media player novb

shuffle  
repeat  
pause  
play  
skip

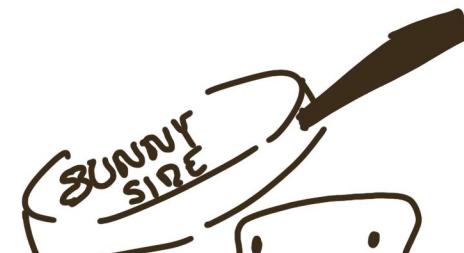




# PROXIMITY APPLICATION

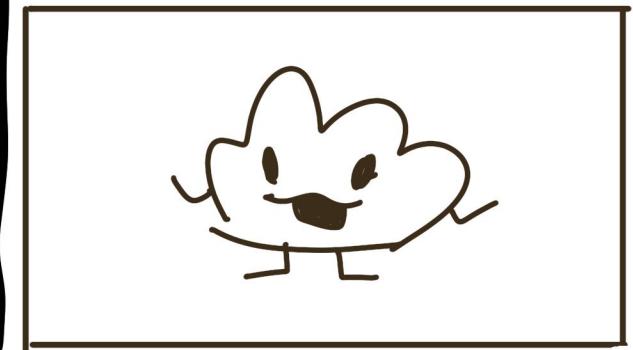
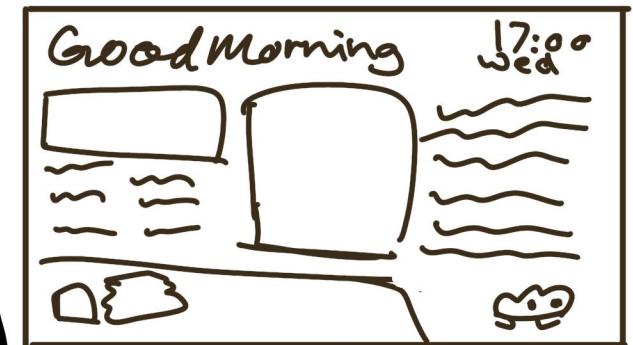
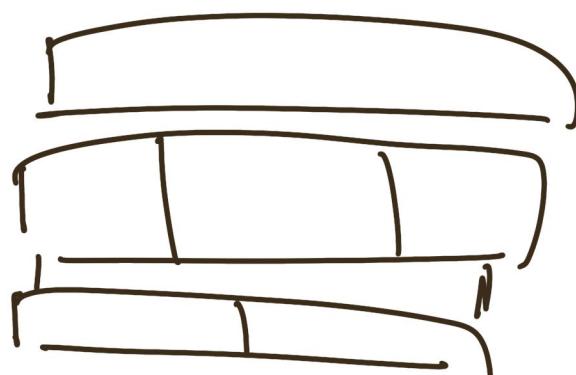
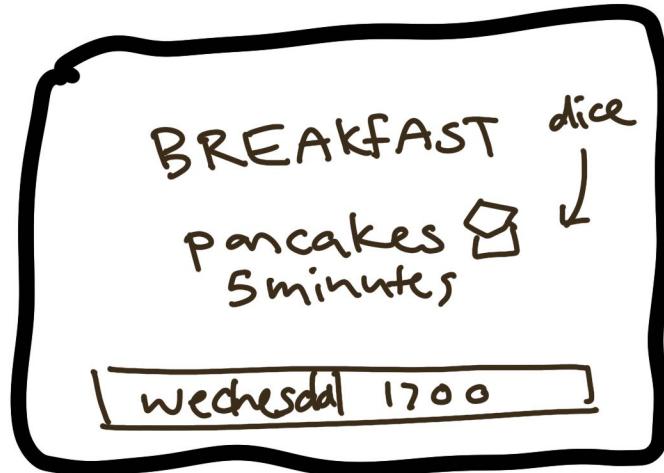
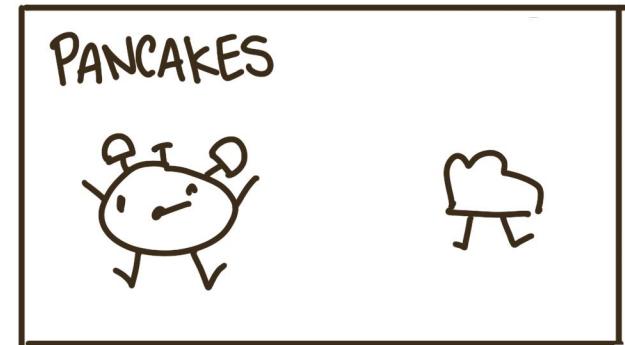
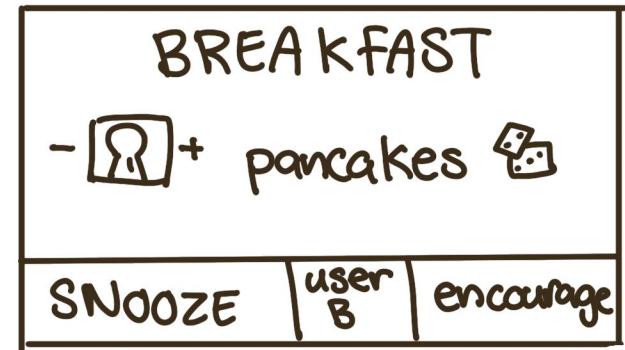
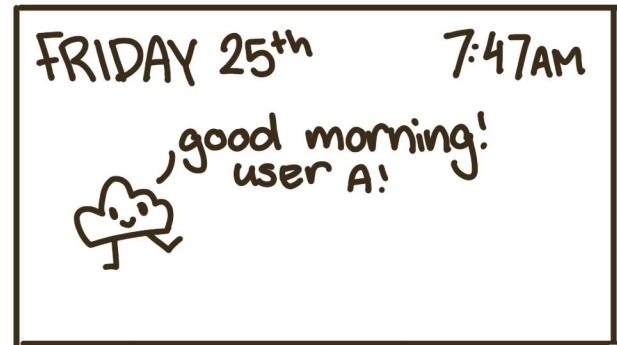
You have 10 dishes

I love dishes  
and am  
allergic to  
human food

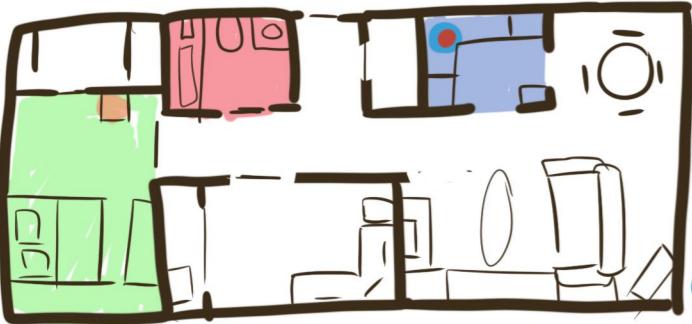




smart clock

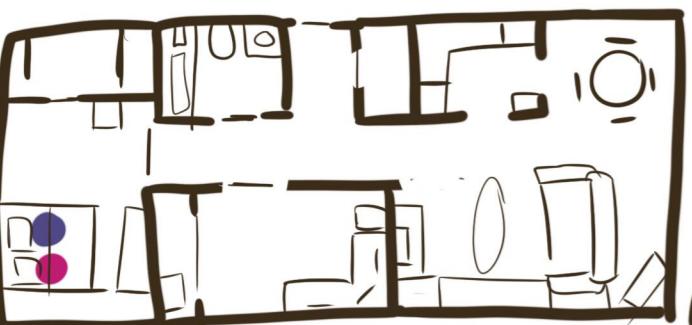


# PROXIMITY APP - SUNNY SIDE Uppies - adult lol scheduler

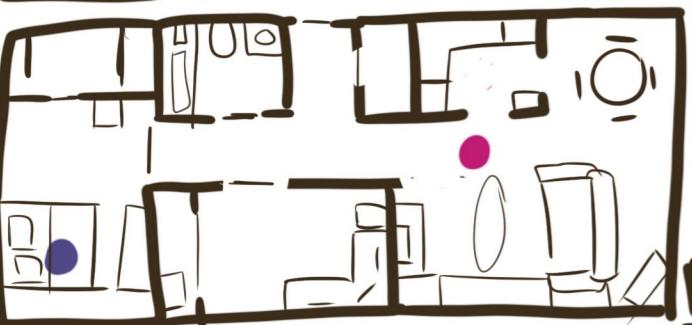


Bedroom  
kitchen  
bathroom  
Pets  
device

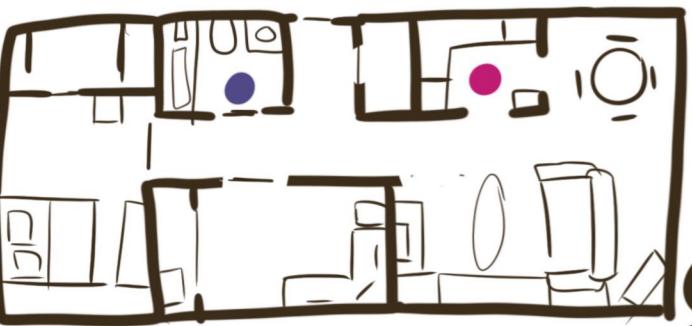
- A
- Both primary users in bedroom
1. alert users w sound
  2. provide options on list
    - ↳ selections disappear after chosen
    - a. snooze
    - b. shower
    - ↳ alert only lets up when bathroom detection



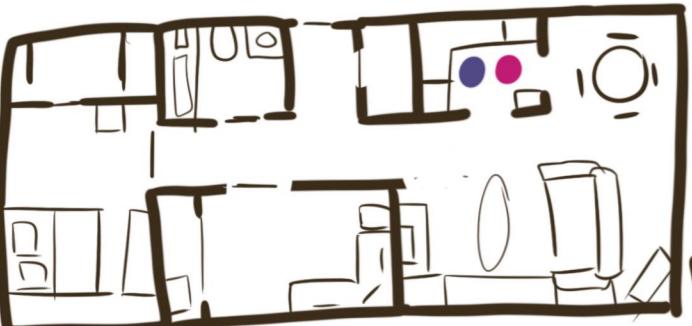
● personA  
● personB  
● personC  
A inspire awake



B encourage breakfast  
↳ snooze/motivate secondary



C inspire awake - bathroom  
prepare food & count dishes



D reward cleaning  
prepare food



E recommend 3 person meal

Main  
track ingredients  
dirty dishes  
clean dishes  
mouths for cooking  
remind user to eat  
motivate wake up  
notify eating times when away  
bug user if not eaten 3 meals

**LOCATION: KITCHEN**  
**PRIMARY USER COUNT: 1-2**  
**SECONDARY USERS: YES**

**REQ:**

**PROXIMITY**  
**PHONE LOCK & ALERTS**  
**PAIRING**  
**ACCOUNTS & FRIENDS**  
**SPEAKER & CAMERA**

Scope too much

lots of ideas

start smaller

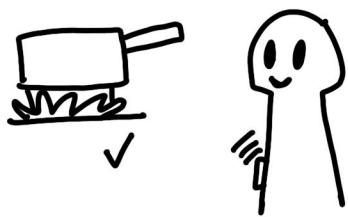
little guys on screen

dirty environment  
if more dishes

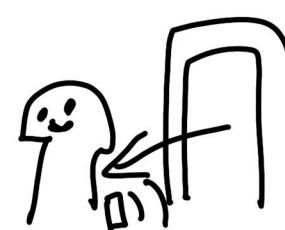
good morning user A  
eggs for breakfast?



# smartify tech: smart stove



nearby ✓  
something ontop✓  
can be on

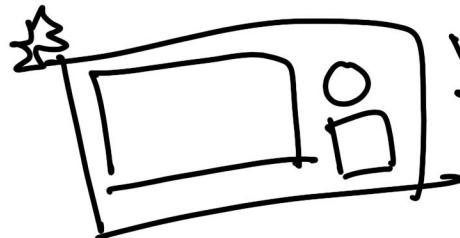


far away  
X  
turn off

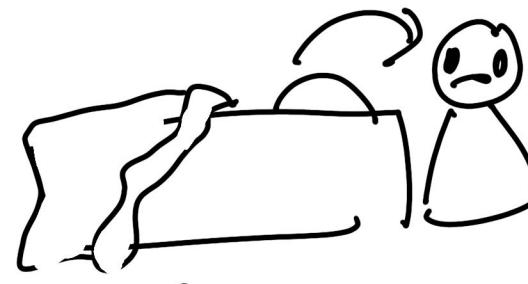


nothing on top  
X  
turn off

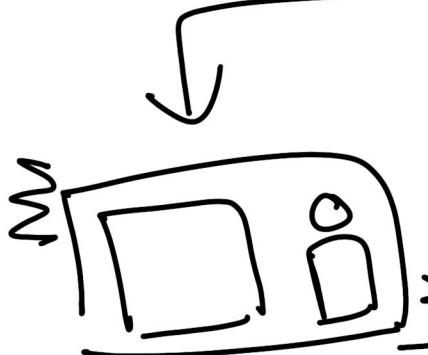
# smart snack microwave



microwave  
is fridge at  
night



get out  
of bed



microwave  
starts  
heating

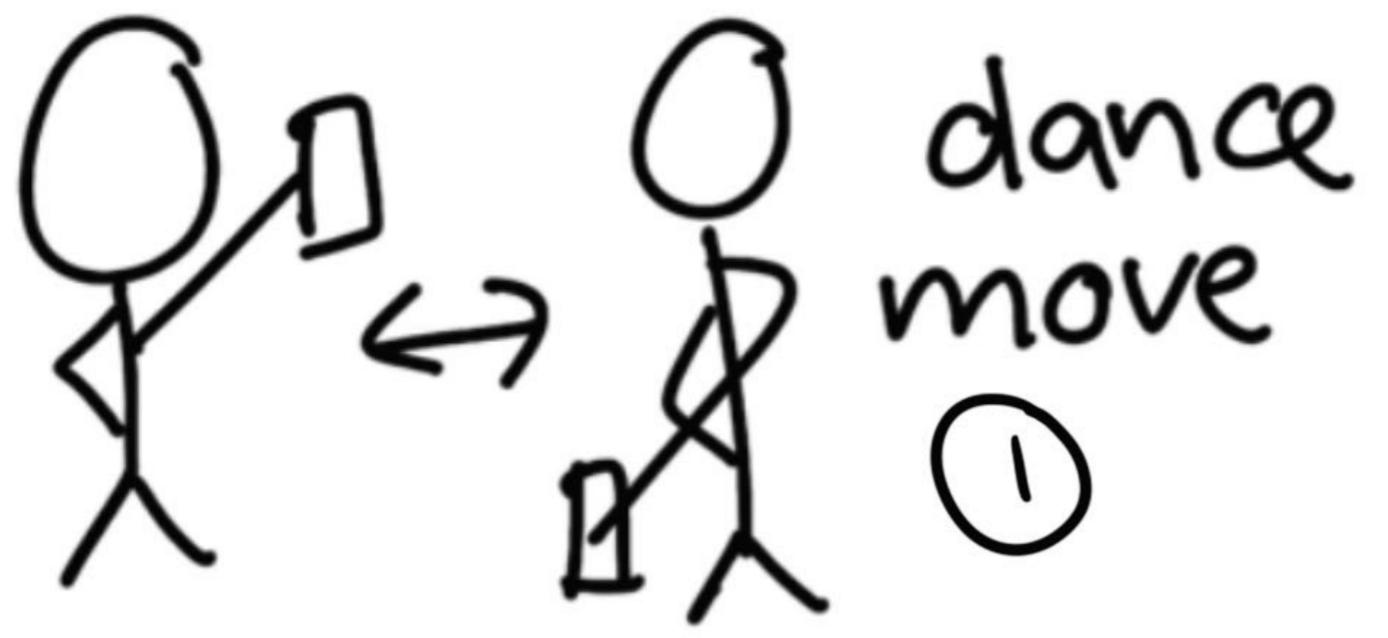


yummy  
warm  
snack



Caitlin McConney  
30118618

581 as1 as2 as3 as4



dance  
move

unlock with  
movement  
and



toss  
up

②

Accelerometer



yoga  
routine

③



full rotation of arm  
measures  
diameter  
/height

④

two person interaction using proxemics



people have their names displayed  
conversations are labeled  
so in big crowds you can  
choose a convo to join  
people in convo are notified that  
someone is in "earshot"

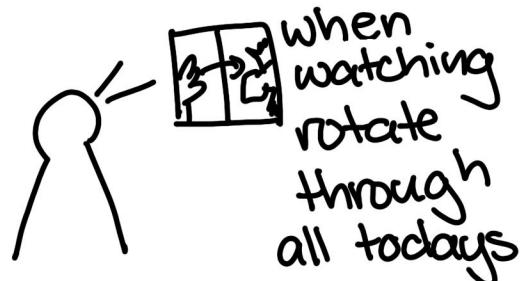
# Proxemic interactions with mobile app

app: locket (photos from friends on home screen)

when far



shows most recent

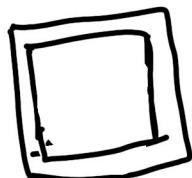
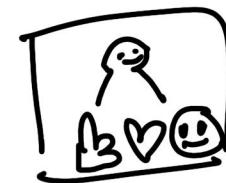


when watching  
rotate  
through  
all todays



when in  
front detect  
reaction and  
give suggested  
reactions to send

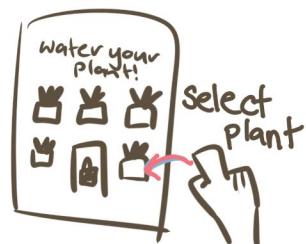
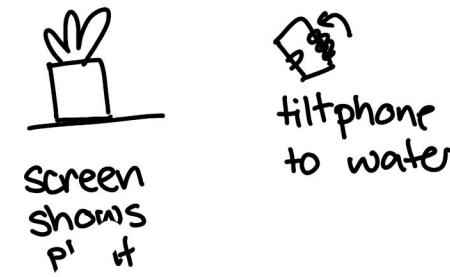
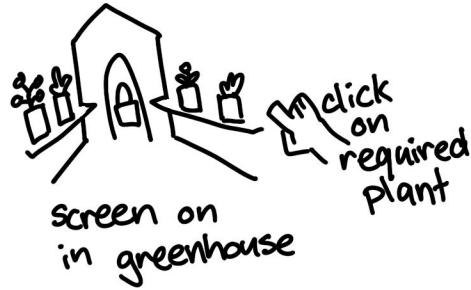
if close enough to identify user  
show that users account



square tablet on wall  
at home entrance  
to get friends day  
summaries

## Greenhouse

①  
1 ↘  
scoop water to turn on screen



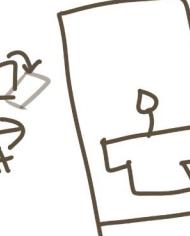
Select plant



Plant fills screen



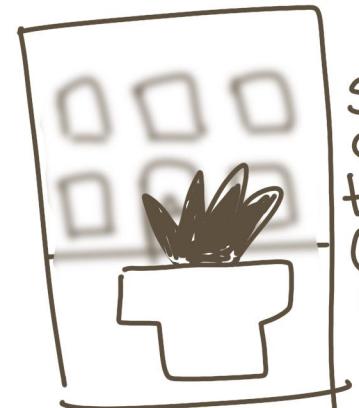
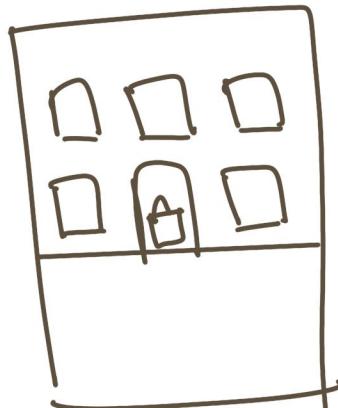
water plant



click plant to lock screen on this plant

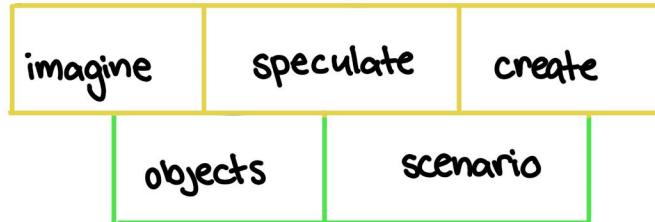


waterbucket appears on lock



Selected comes to front (background blurs)

# Design futuring



what might the future of technology be?

star trek

the universal translator

holodec - VR simulation room

heads up display

why?

explore unknowns and possibilities  
involve discussion

explore

tech culture society impact  
environment ethics extremes...

design fiction

design a future and explore  
the implications of that reality

# Black Mirror writers room



chip implant holds consciousness



robot drones take chip to let you commute to work



worker robot takes chip from drone to 'remote' to work

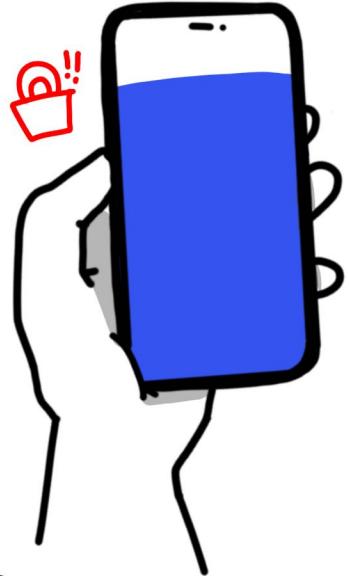
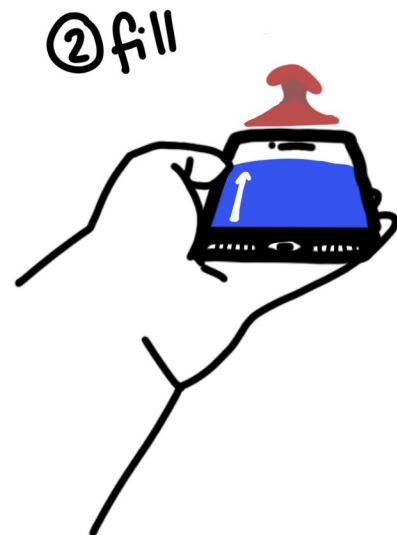
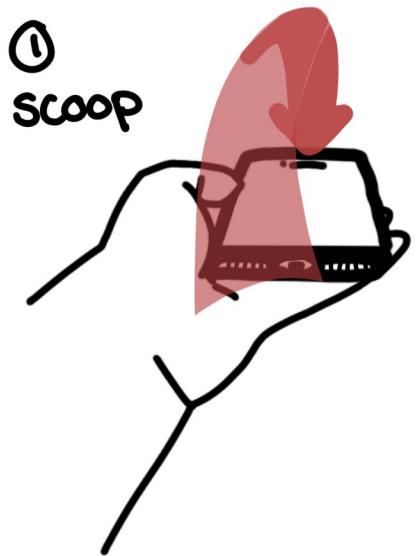
no commute! chip break=murder  
could you clone yourself?

work clone, shopping clone,  
during sleep all chips sync up

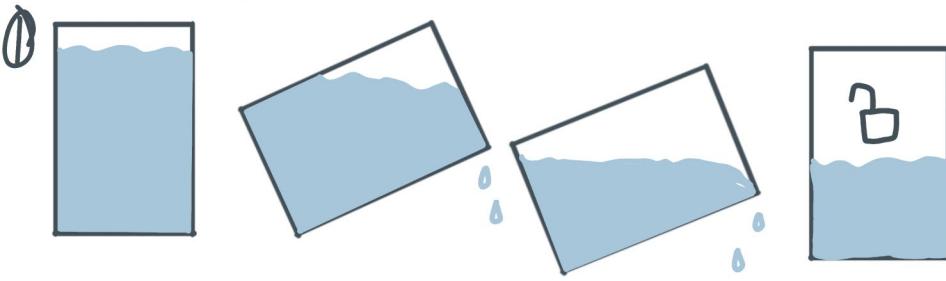
what if a robot is maliciously infected?

what if all robots are busy at end location

## AS2: Rotoscoping-'drink' to unlock

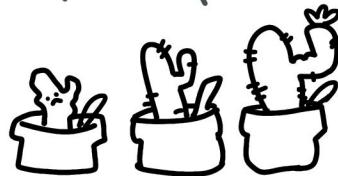


water slurp



scoop motion to fill  
tilt towards face to drink

hold straight up to confirm



scoop to fill water cup

greenhouse select plant

water plant

plant grows up on screen (or maybe hydrometer has indicator to show how much is grown)  
hold vertical for ~3 seconds for confirmation  
dead plant represents false attempt

↳ know someone broke into phone

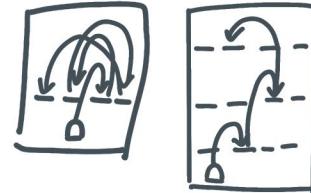
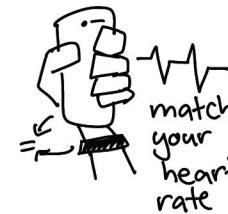
when successful unlock go out greenhouse door

physical keychain  
key chain or key used as physical key via camera & depth/size sensor

point to location

②

jump pass



with side to side rotation guide the jumping character

③



strike a pose

④



full arm rotation (measure diameter)

⑤



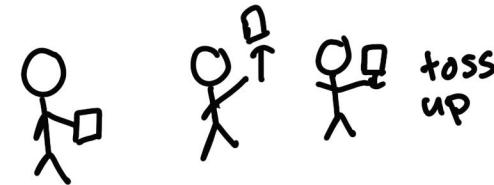
yoga routine



dance move

spin 360 on flat surface

flip over on flat surface



tap aggressively in pattern (pressure sensor or movement)



rotoscoping

tracing a photo rather than using a photo

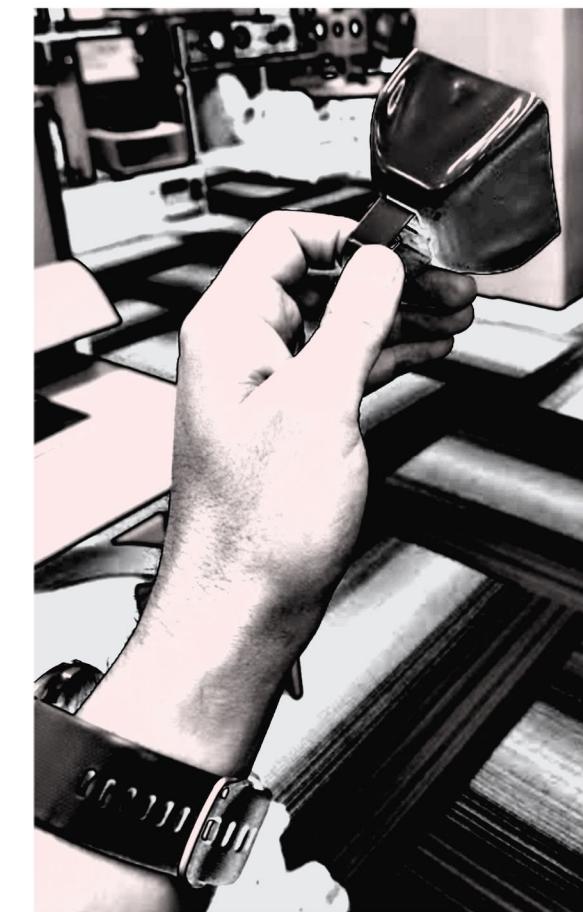
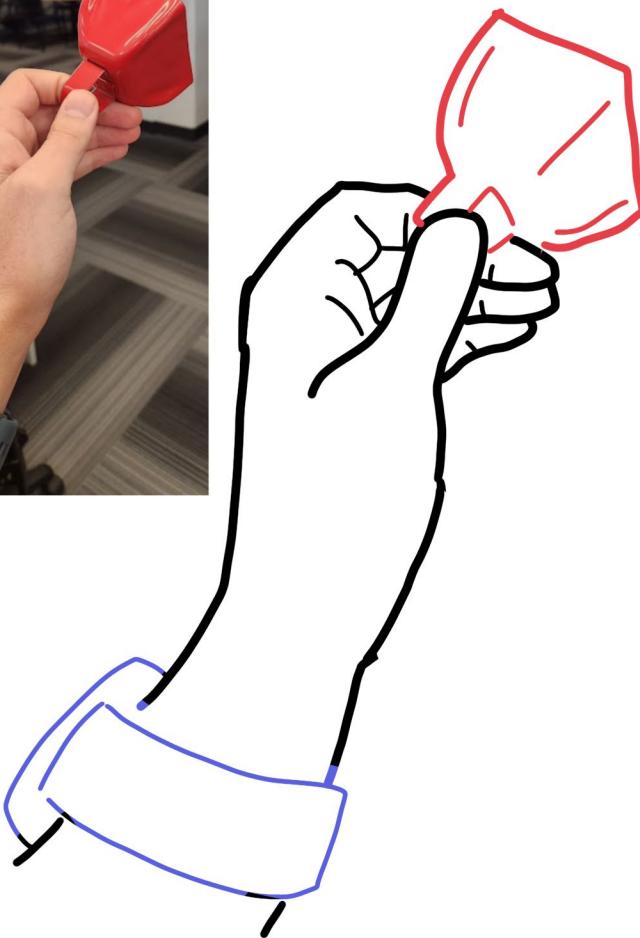
↳ removing additional info

↳ cleaner

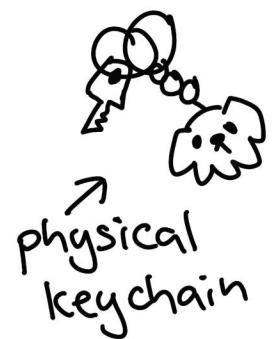
↳ reusable and easy to edit reuse + annotate

↳ colour can highlight important

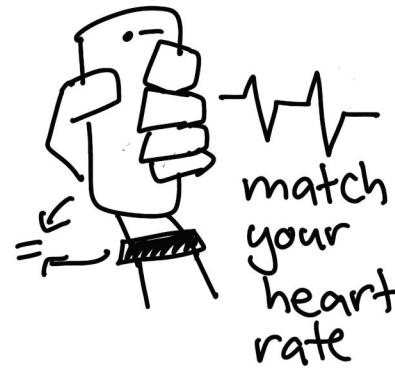
↳ can add direction + intangible things



# unlock smartphone using sensor



key chain or key  
used as  
physical key  
via camera  
& depth/size  
sensor

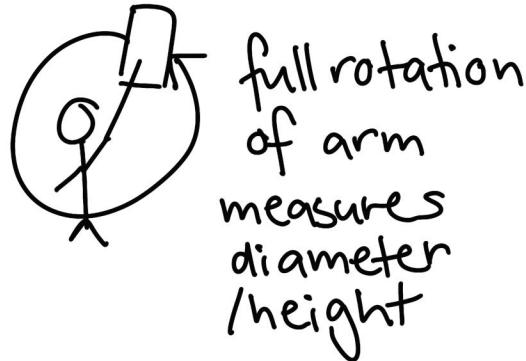
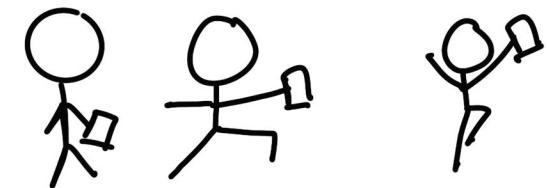


match  
your  
heart  
rate

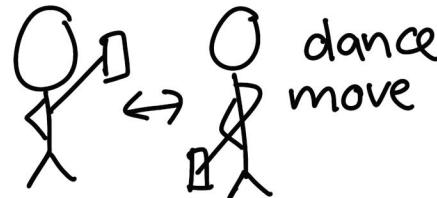


humidity  
of breath

yoga routine



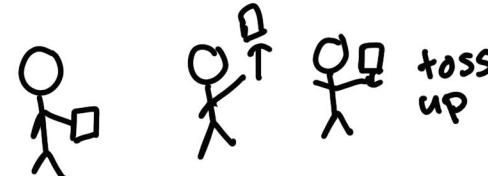
full rotation  
of arm  
measures  
diameter  
/height



dance  
move



spin 360 on  
flat surface

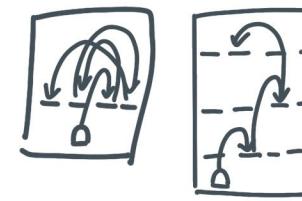


toss  
up

jump pass



flip over on  
surface



with side to side  
rotation guide the  
jumping character



point to  
location

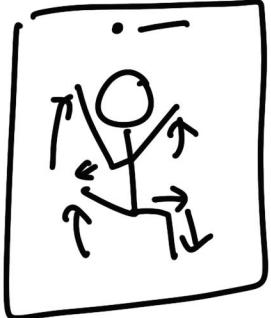
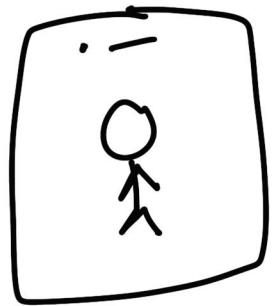
tap aggressively  
in pattern  
(pressure sensor  
or movement)



cover &  
uncover  
camera  
in pattern



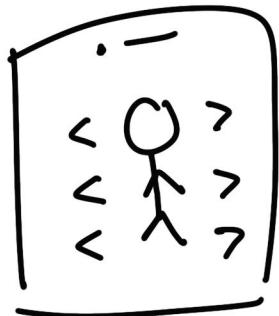
# ways to unlock a phone using touchscreen



position  
figure



(friends could getin)  
name a person  
from your camera  
roll



dress  
up match  
pass code  
outfit



play  
a tune

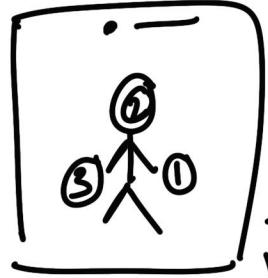
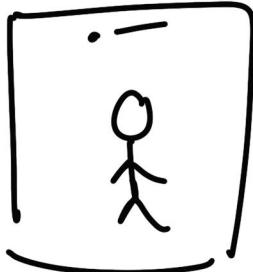
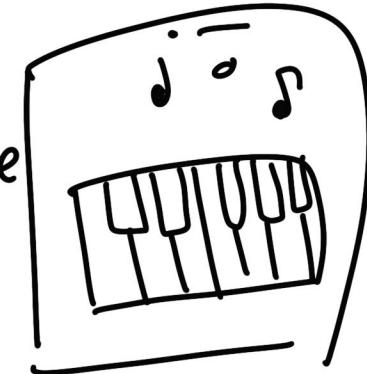


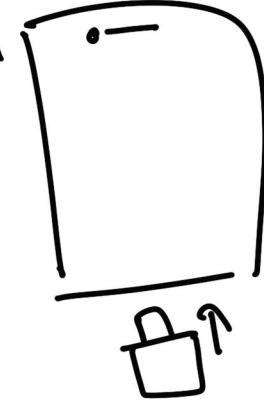
figure  
body  
touch  
passcode

phone  
unlock



just think  
about it

physical  
key





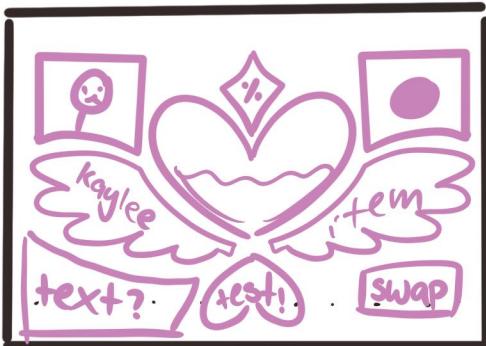
## Critiques

- ↳ Kaylee tells the user something about the
- ↳ which one did Kaylee like more?
  - ↳ memory game
  - ↳ trivia true or false on Kaylee fact
  - ↳ did Kaylee like that item?
- ↳ gameshow/trivia theme lean into it more
- ↳ user guesses if Kaylee will like or dislike the thing

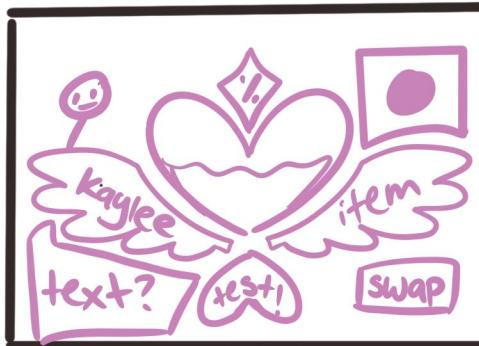


# Tale of two buttons design refinement

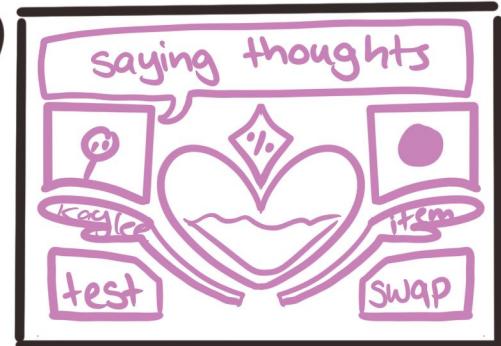
①



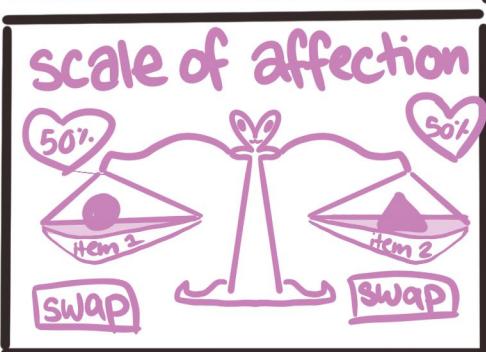
②



③

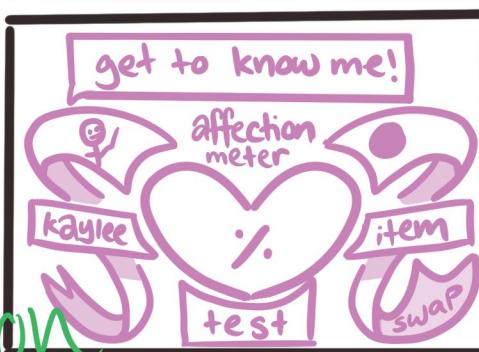


④



MOST liked option

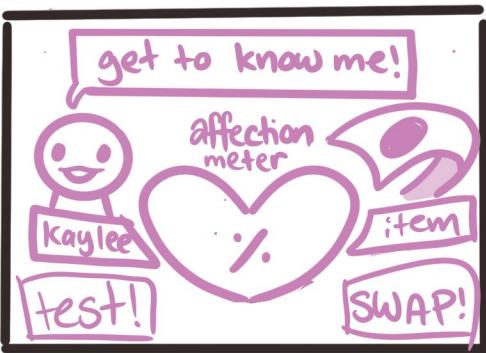
⑤



⑥



⑦



⑧



⑨

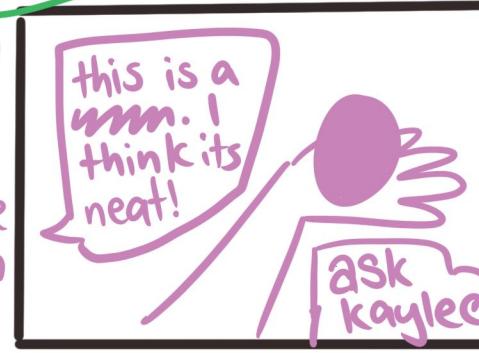


⑩



click item to rotate through

⑪

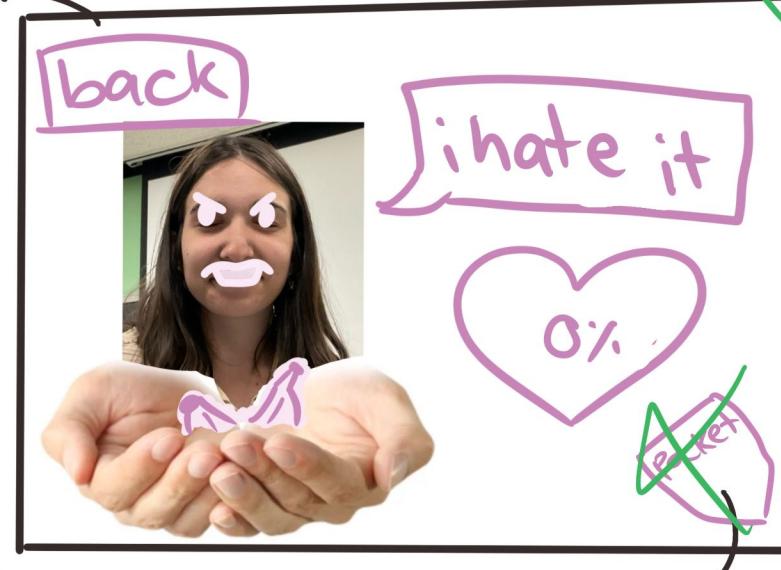
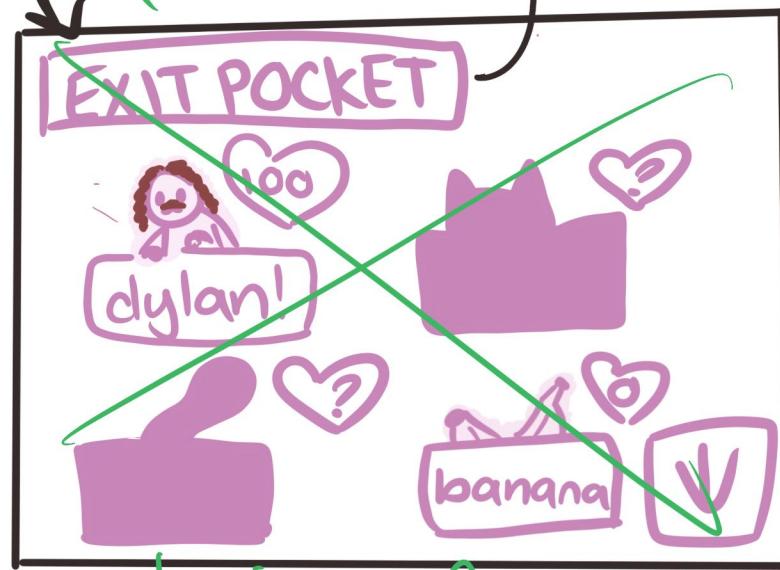
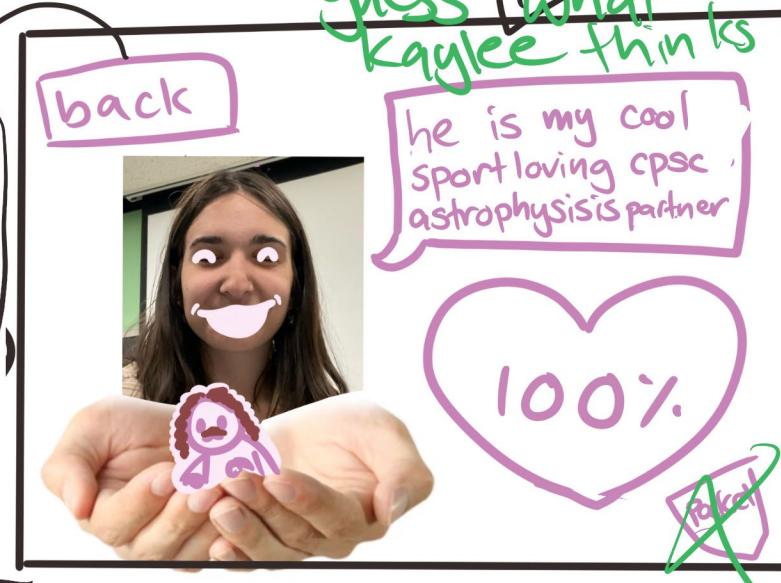
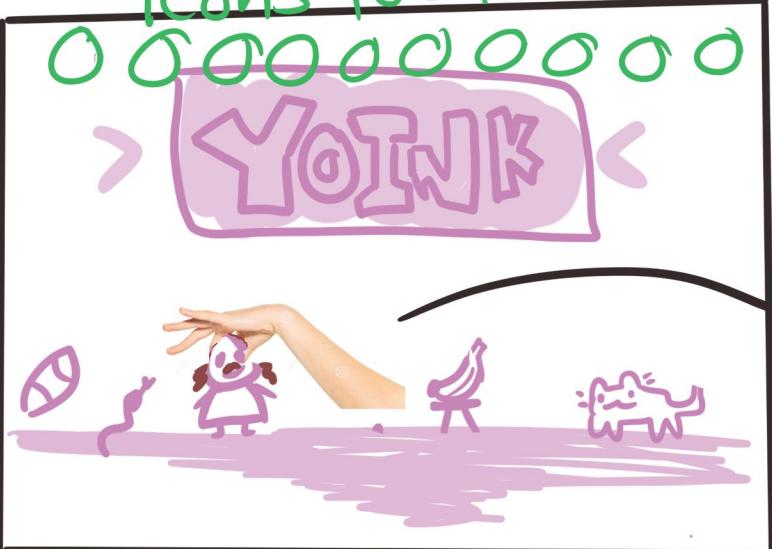


⑯.2



# Yoink love meter combo (green critiques)

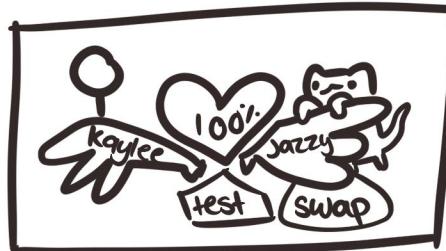
icons to Show whats grabbed



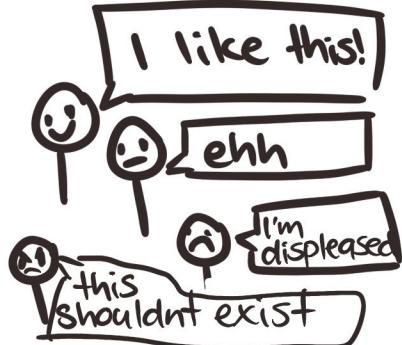
get rid of pocket

# 10x10 - Refining the tale of two buttons - love meter

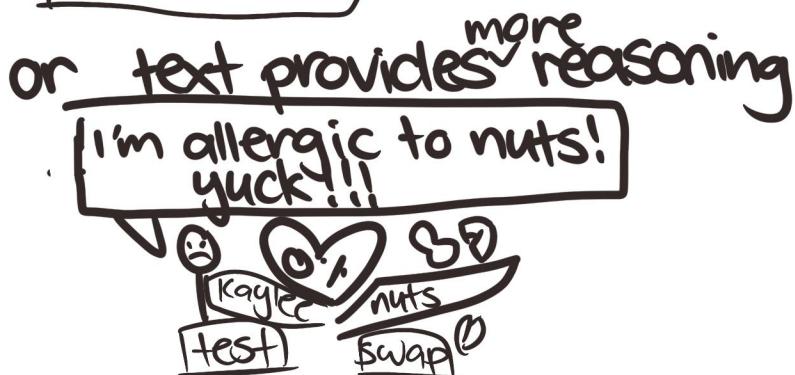
## love meter



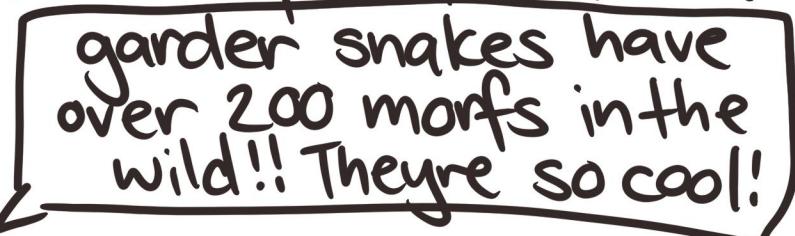
enjoyment % displayed in heart swap button just under item character/item not boxed in



iteration expression on Kaylee changes and she reacts via text



or text provides more reasoning



or text provides trivia

garter snakes have over 200 morphs in the wild!! They're so cool!



more boxy design



Kaylee centric design  
Kaylee holds item



or Kaylee just holds the item and talks about their thoughts



random

contains sports and teams

95% hockey

90% football

40% interpretivedance

60% badminton

50% ottawa senators

food

0% banana 0% nuts

0% pork

games

animals

and more

litterbox 45%

socks 30%

ceiling fans 45%

# 10x10 tale of two buttons refined-yoinker



① YOINK  
button #1  
changes based on  
① PAT



firehand  
at moving  
trajectory

## SECOND BUTTON

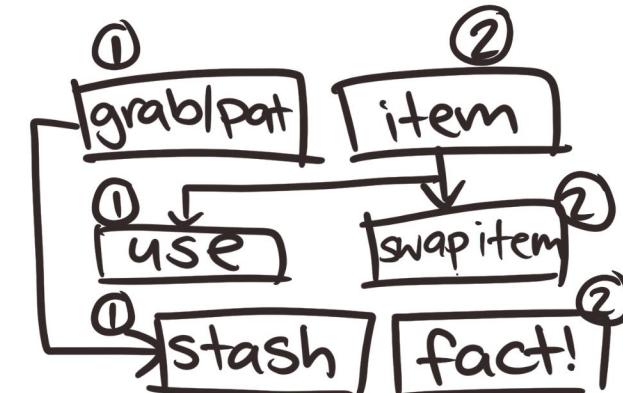
STASH grabs thing into inventory

FACTOID kaylee tells user about thing

ITEM kaylee grabs item from pocket  
to entice the thing

USE use replaces "pat" or "yoink"

hand moves on track  
around screen

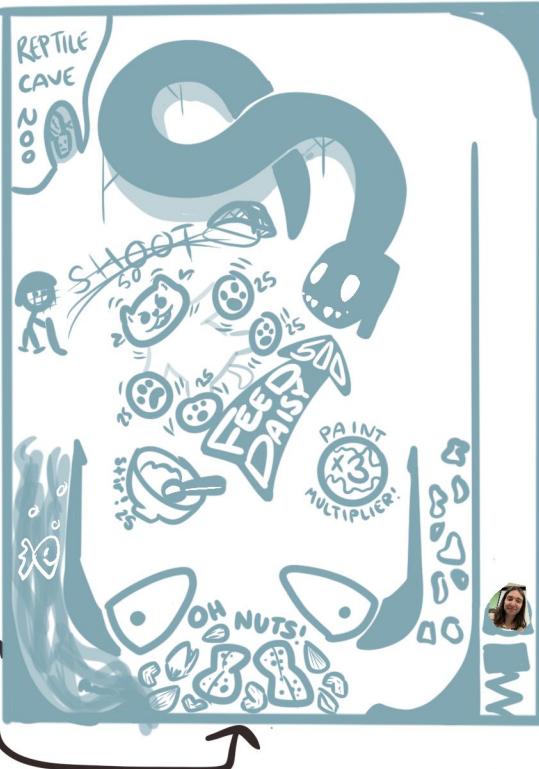


items can be  
used to entice  
creatures

# Refined ideas

## 5 Kaylee pinball

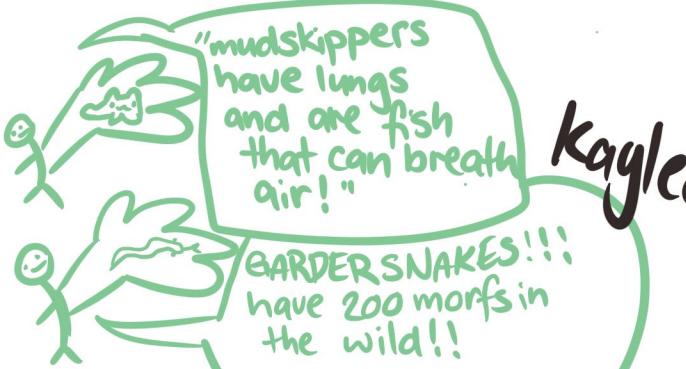
points  
for  
things  
kaylee  
likes



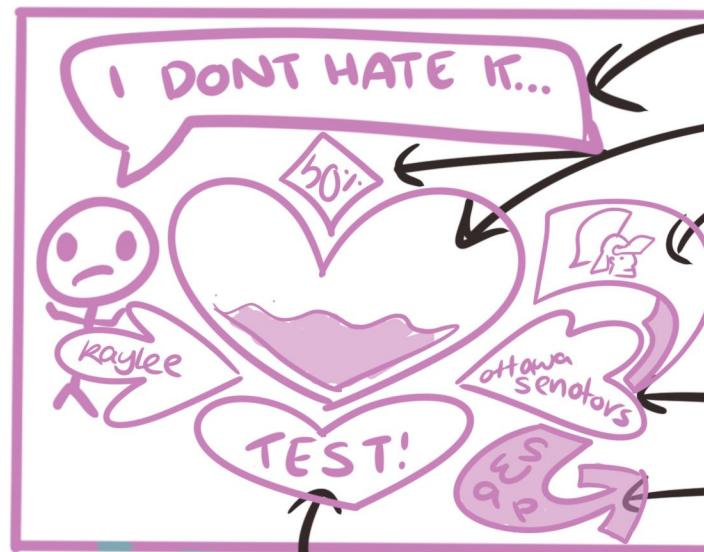
when recalled  
kaylee will bring  
Something from the  
woods and tell you  
a fact about it

**send  
to woods**

**bring  
back**



## 6 love meter



reason &  
kaylees response  
love meter

icon  
representing  
thing

name of thing

swap out item  
(random?)

likes
Jazzy 100%
Climbing 90%
Painting 90%
Hockey = 90%
Football 80%
Cucumber 40%, dislikes
Wasps 55%
Styrophone 10%
Workplace 0%
Pork 0%; injury 0%

## 8 Kaylee forreger



public restroom  
pokemon go  
hollow knight  
daisy 100  
platapus 97  
jazzys  
litter  
box 45%  
wet socks 0%  
socks 50%  
overripe fruit 20%  
dylan 100  
dirt 50%  
ceiling fans 45%

\*  
a lernate  
skamper/recall  
and change biome  
(mountians, beach, kaylees room,

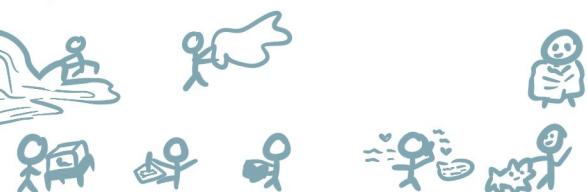
1



button #1

(unlock)  
button #2

button #2



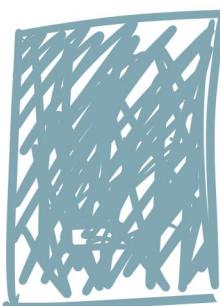
2



(pretend that's kaylee)

trivia allows kaylee to give you a fact  
pat gives kaylee a pat on her head

3

all lights  
out, user  
clicks around  
room to find  
a lightswitchnoo!  
daisy's  
nocturnaldaisy hides  
kaylee  
turns  
light back  
offturn on  
dim light  
to hang  
out with  
snakes

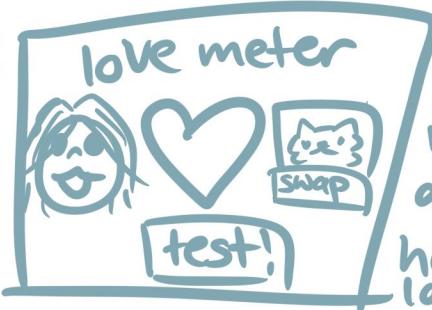
4

user can  
press climb  
or jump and  
kaylee will elevate

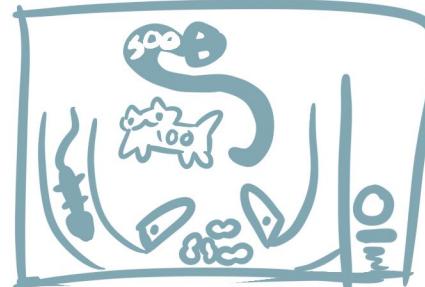
5

throwing  
back  
or  
stealing  
from big  
corporations

6

love  
meter for  
animals  
hate invasive  
reptiles

7



pin ball!

8

kaylee runs into  
the woods and  
brings back a  
cool object

9



10



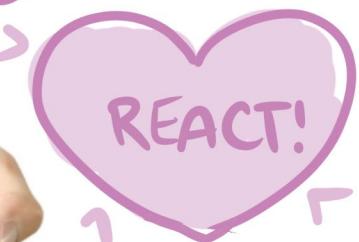
YOINK



back



this is dylan!



YOINK



back



this is a banana



EXIT POCKET



100

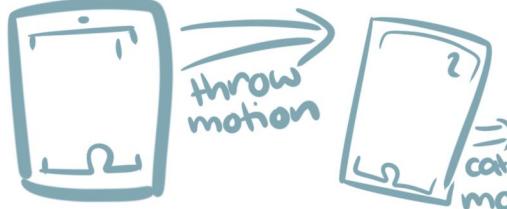


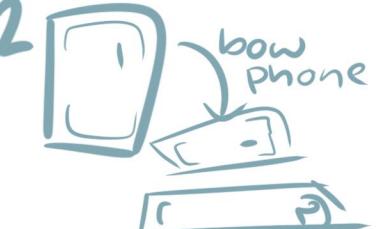
banana

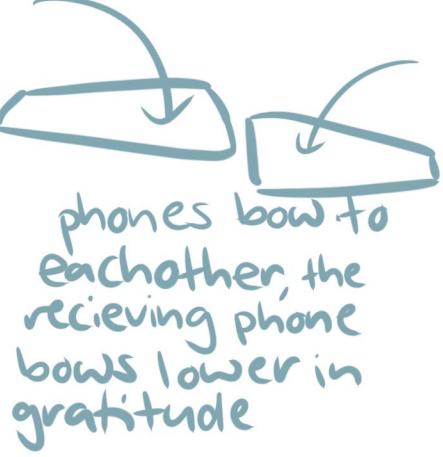


scroll

# Produce 10 variations - Connect phone through gesture

- 3 

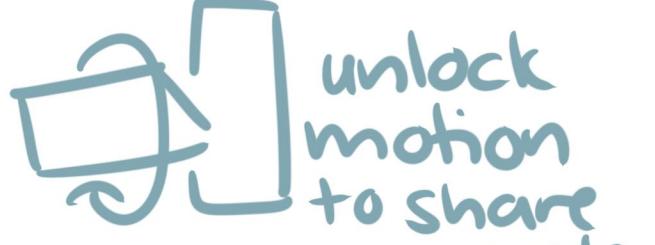
throw motion
- 2 

catch motion
- 3 

phones bow to each other, the receiving phone bows lower in gratitude
- 4 

knighting of receiving phone
- 1 

throw
- 6 

phone drop  
"scatters" files to all accessible nearby devices
- 7 

unlock motion to share passwords
- 8 

smooth to share contact
- 9 

build tent phone to share addresses
- 10 

''fan'' phone to share money
- " 

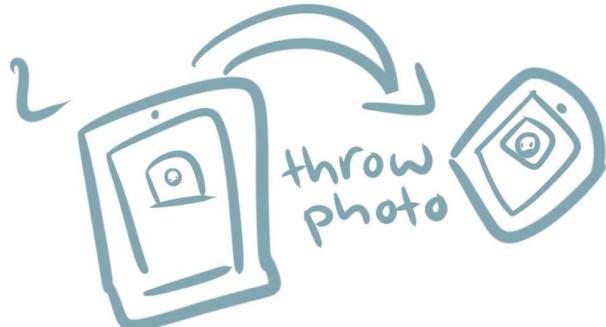
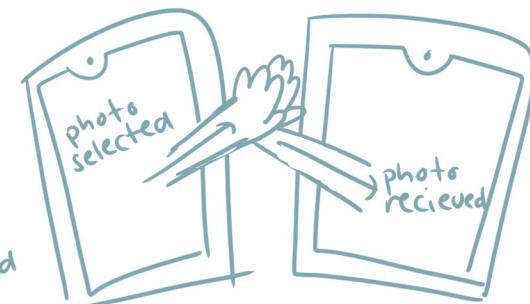
go to sleep

# How to connect phones for transfer

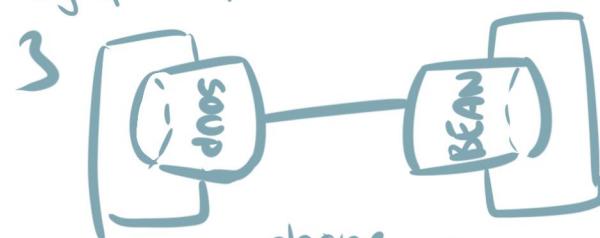


CLAP!

info exchanged  
via palm  
chip  
high five confirmation



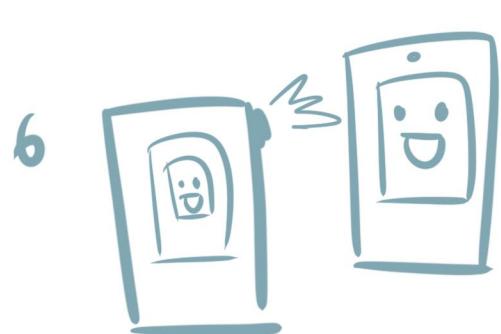
"lands"  
in direction  
to other phone



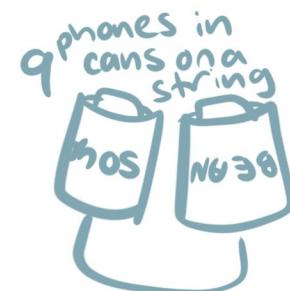
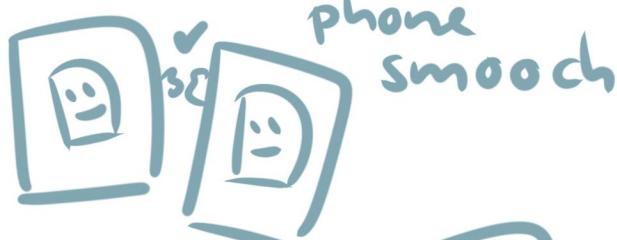
phone on a can on a  
string



scan fingerprint to exchange



second phone  
sees flash  
and sends



mitosis

