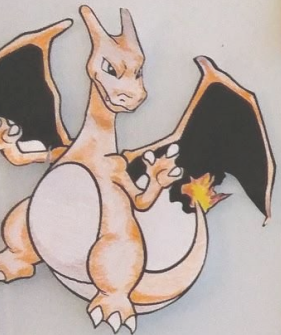


POVs & Experience Prototypes



incentivize
cleaning improv
punish non-cleaning

improve household chores/

gauge quiet preferences
summarize quiet hours of members

communicate momentary openness
make it easier to express need for personal space

general resource for efficient cleaning

point system

roommate progress tracker

use music to influence other people's awake-ness

notification if you spent too much time in room

door opened or closed based on calendar/custom input

social network for roommates

shared grocery list

designate resources



beacon for quiet time

use music to influence other people's awake-ness

beacon for open time (status-esqui)

group scheduler

group scheduler

messenger that manages multiple issues

meal coordinating

virtual up of ping thresholds

auto-adjust volume

mood lighting

fake call = excuse

sit at dining table

heart rate → music

house finance manager

split up plan using app

suggest group events

"punish" w/ "neighbor's noise"

how to manage commonspace

house space manager/scheduler

Our Team



David

Junior, CS

Loves watching
random videos



Evan

Senior, CS

Enjoys classical
piano



Tessera

Junior, CS

Loves going
scuba diving



Michael

Junior, CS

Plays music
Needs job

Initial POV



We met Ruth, a full-time stay-at-home mother of 5

We were amazed to realize she organized all activities and events in a personal planner

It would be game changing to have an easier method of organizing different household activities



Additional Needfinding

Molly

Staff at InterVarsity,
lives in house with 7
housemates

Alex

College student in
apartment with 2
housemates





Alex

- “Home” is more about the people you know and spend time with
- Household tasks often go undone because people are too lazy to do them



Molly

- Bought a dining table for home, completely changed the dynamic
- Wished she had a way to organize communal tasks among household

Problem Domain

Improving interaction between
young adults at home



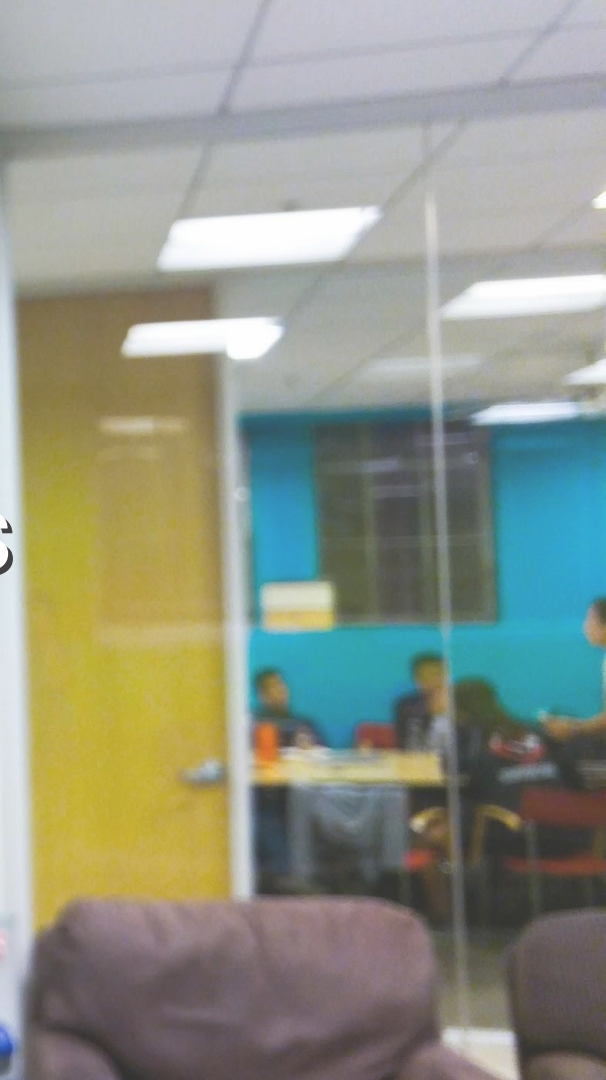
Swore when mentioning people killed clean up

has to mail up

delegate
has for

pulls hair while talking

POVs & HMWs



We met...

Jennifer, a senior at the USC School of cinematic arts who lives in an off-campus apartment with 7 other housemates.

We were amazed to realize...

None of the housemates actually took responsibility for any mess that they made.

It would be game-changing to...

Easily manage responsibilities and accountability of all members sharing a living space.

How might we...



...improve completion of mundane household chores?

How might we...



...improve completion of mundane household chores?

- Keep a point system between housemates
- Track household work per roommate
- Have a clear way to **assign tasks** to housemates
- Maintain a house **finance manager** to keep track of the rent cost and bills and charge each housemate the proper amount

We met...

Emmanuel, a full-time software engineer in his mid thirties who lives in a studio apartment by himself.

We were amazed to realize...

Although he lived by himself, he was still considerate of his neighbors and conscientious of his living habits.

It would be game-changing to...

Create a more transparent relationship between him and his neighbors.

How might we...



...more accurately gauge neighbors' quiet preferences?

How might we...



...more accurately gauge neighbors' quiet preferences?

- Create a shared calendar of the neighborhood's quiet hours
- Have beacons on houses to signal quiet time
- Create a virtual map of sleeping households
- Alert users to high volumes in their homes
- Automatically adjust the volume of TV/music based on the time of day

We met...

Jessica, a Stanford student whose parents own and live in a mobile home.

We were amazed to realize...

Despite the inconveniences and difficulties associated with sharing a small space with others, she still enjoyed her experience in her new “home” with her parents.

It would be game-changing...

To keep the social benefits associated with sharing a living area, yet also clearly define one’s personal space.

How might we...



...make it easier to communicate either momentary openness, or a need for personal space?

How might we...



...make it easier to communicate either momentary openness, or a need for personal space?

- Use music/lighting to influence the “awakeness” of the people in your room
- Indicate when people can come in to your room and hang
- Visualize a schedule of when people are busy or don’t want to be bothered
- Designate a “communal” area at home (**dining table**) where people can **spend free time together**

Experience Prototypes



Task Manager



Mark & Sarah

- Sarah made organizing the list an essential part of ensuring tasks were completed
- Mark used the items on the list to create house rules
- Sometimes a carefully constructed task manager is not enough
- Incentivize members of group

Dining Table



Jonathan & Fiona

- Fiona preferred to do work or read
- Jonathan wished he had a list of people who were available
- Finding available people can be frustrating
- Some people preferred planned meetups

Groceries is 5 cents

Total: 40

Finance Manager

Month 2

Rent is 24 cents

Internet is 5 cents



Alex, Jaimi, Remy, & Kimiko

- Kimiko liked having costs calculated for her
- Jaimi wanted confirmation before money was taken
- Managing money IS difficult
- “Strikeout” system may be necessary

Thank you!

Appendix

HMWs for Jennifer's POV

- **incentivize cleaning and punish those who don't?**
- create a more harmonious living space?
- increase communication?
- make cleaning fun?
- change roommates' attitudes?
- reduce messes?
- rotate cleaning jobs?
- make cleaning social?
- use the mess for good?
- group people based on messiness preference?
- turn the mess into a playground?
- incentivize responsibility between housemates?
- employ accountability tactics?

HMWs for Emmanuel's POV

- **have a system to summarize one's neighbor's quiet hours?**
- **gauge a neighborhood's quiet preferences?**
- create an intermediary system for noise complaints?
- make it easier to complain about your neighbors?
- increase communication between neighbors?
- turn your own house's mess into a bonding activity?
- replicate other neighbors' experiences to increase empathy?
- remove or reduce worry about disturbing your neighbors?
- encourage considerateness within a neighborhood?
- make loudness a positive thing?
- promote transparency between neighbors?

HMWs for Jessica's POV

- **make it easier to communicate momentary openness?**
- **make it easier to express need for personal space?**
- eliminate the need for personal space?
- foster shared experiences?
- strengthen bonds between people who share space?
- encourage spending more time with housemates in a communal space?
- more efficiently utilize communal space?
- create a better way of scheduling “me” time?
- transform personal space into a shared space?
- encourage smaller spaces?

Solutions for improving completion of mundane household chores

- Have a general resource for the household that allows for efficient cleaning
- Keep a point system between housemates
- Create a simple way to track the household work each roommate has done
- Create a social network for people to find roommates, where profiles consist of ratings and reviews from one's previous roommates
- Have a grocery list that is easily shared between housemates
- Have a clear way to assign tasks to housemates
- Offer a simpler way to schedule events and tasks within a group
- Have a messaging app that is able to track and manage multiple issues
- Have a way to coordinate meals, so that if roommates know how many people to cook for and who they would be eating with
- Have a "house finance manager," which keeps track of the total cost of rent and all bills and properly charges each housemate his/her proper amount
- Have an app that can analyze the floor plan and split rent exactly based on room sizes
- Create an easy for people to suggest group events

Solutions for gauging neighborhood quiet preferences

- Find a way to create a shared calendar of the neighborhood's quiet hours
- Survey all neighbors and share their data with the rest of the neighborhood
- Use satellite images to look at light density and figure out people's bedtimes
- Create a social network for people in a neighborhood to use
- Have a system to manage a rotating game night so that neighbors can get to know each other
- Have beacons on houses to signal quiet time
- Create a virtual map of sleeping households
- Have a loudness sensor within your home so you know when you are too loud
- Have software that automatically adjusts the volume of the television and any music based on the time of day
- "Punish with neighbor's noise" -- if you're being too loud, you get "punished" with noise from your neighbor's house

Solutions for making it easier to express openness, or a need for personal space

- Use music to influence the state of “awakeness” of the people in your room
- Use mood lighting to influence the state of “awakeness” of the people in your room
- Create a system to notify you if you’ve spent too much time in someone else’s room
- Create hardware that opens and closes your door based on your calendar and/or desired alone time
- Have a beacon outside your room to indicate when people can come in and hang
- Have an app that serves as a group scheduler of when people are busy or don’t want to be bothered
- Create software that gives you a phone call when you are with people, giving you an excuse to be by yourself
- Designate a “communal” area in the house (like the dining table) where people can hang out, rather than in each others’ rooms
- Offer an app that easily manages common space and it is being utilized
- Have an app that allows people to schedule visits to others’ rooms and reserve communal areas for certain events