POVs:

Jennifer:

We met Jennifer, a local mother with a mostly automated home.

We were amazed to realize that she struggles daily to keep track of her supplies (mainly food). It would be game-changing to make supply-tracking easier to do - or even unnecessary.

Jay:

We met Jay, a computer scientist at a local startup, who cares about energy conservation. We were amazed to realize that he enjoyed listening to the music, but the more he enjoyed the music the less sensitive he was to time. He felt guilty for wasting water taking long showers. It would be game-changing to make daily routines enjoyable and also water/energy conserving.

David:

We met David, a Stanford Housing employee.

We were amazed to realize that he had gained an insight into what kinds of decorations he wanted in his house when a roommate brought a surprise pet in to live with them. It would be game-changing to make decorating easier, inspiring, or spontaneous.

Sriram:

We met sriram, a student sharing his apartment

We were amazed to realize, communications between roommates can be hard It would be game changing to make awkward conversations between roommates better without straining relationships

Appendix:

Sriram:

We met sriram, a busy student

We were amazed to realize his sleep gets disturbed every morning because of open blinds It would be game changing to make sure students get good sleep

We met sriram,

We were amazed to realize people think home is about friends but also need privacy It would be game changing to strike a balance between friends and privacy

Daniel:

We met Daniel, a worker at Best Buy,

We were amazed to realize that he struggles to find his remote in his couch with the same color It would be game-changing to make it easier for Daniel to find extremely important items in his house wherever it is

HMWs:

Jennifer:

HMW make an organizational system for someone to keep track of supplies in his or her home

HMW alert people well before they run out of a highly demanded item in their house

HMW automatically reorder products that are in low quantity/amounts in someone's house

HMW give information about a product that's most relevant to the given person as they are using it in their home

HMW curb the use of supplies

HMW remind people how much of any given material or product they're using in a task

HMW allow people to plan for future use of supplies so they can obtain more early on

HMW link 'smart' sensors to existing systems (e.g. NEST) that can predict low supply count

HMW alleviate the stress associated with missing highly demanded products

HMW make supply tracking fun

David:

HMW show people what an apartment really feels like before they move in

HMW motivate someone to decorate their house

HMW help a user decorate his or her house

HMW turn an unexpected surprise in a home into a positive experience

HMW provide a new aspect to the home to enhance the social atmosphere

HMW make decorating a home exciting

HMW match a home decoration to a user's style with minimal information about the user

HMW learn good decorations based on a few of the user's preferences

HMW give a user more control over the decor in their home

HMW minimize the number of negative surprises and maximize positive surprises a person has in their home

HMW make home decoration a group experience

HMW easily decorate home differently everyday

Jay:

HMW alert people the time they spent while doing energy-consuming activities?

HMW reduce the time people spend on resource-intensive actions?

HMW make resource conservation more interesting?

HMW make people more aware of time when they are doing the things they enjoy?

HMW make water/energy saving a fun part of our daily routines?

HMW make daily routines less time-consuming?

HMW use music as a timing tool for our daily routines?

HMW produce energy/water resources while doing things we enjoy?

HMW allow for occasionally high moments of resource use while minimizing overall usage?

HMW encourage the masses to conserve, all at once?

HMW popularize conservation so people compete to conserve?

Sriram:

HMW make a person more considerate of their roommate

HMW notify people in a positive manner when they are disrupting their roommates

HMW ease conflict between roommates

HMW anonymize feedback between roommates

Solutions

Jennifer:

HMW make an organizational system for someone to keep manage supplies in his or her home

- 1. Notifications when food is expiring soon
- 2. Notifications when a typical use cycle is over for a product (user usually uses up toilet paper in 2 months; set a reminder every 1.9 months)
- 3. Something that keeps track of the food being made and guides user into the best way to prolong supplies
- 4. Something that keeps track of cooked food and continually keeps a date that the user will run out of things to make
- 5. Dynamically keeps a list of recipes that users may enjoy based on past food choices A
- 6. An amazon echo like device remind and keep track of to buy lists and make orders on instacart YM
- 7. Sensor in fridge to detect rotten and expired food
- 8. Automatically reorder insufficient supplies A
- 9. A dynamic table that updates based on what food you recently buy and uses a camera to determine which food is running low
- 10. A picture graph of the most used food. It would give a more visual way to see what is running out before going shopping
- 11. A scanner that automatically scans items that are put into a fridge and displays the results outside the fridge
- 12. Recipe suggestions based on available resources

David

HMW make home decoration a group experience

- 1. Post to Facebook feed whenever you buy furniture/decorations
- 2. Suggest art based on what your friends liked
- 3. Suggest decorations based on what the overall community likes A
- 4. A VR system that invites friends to virtually work on home decoration together YM
- 5. Offer 'build a bedroom' competitions that award prizes to the teams that make the most stylish rooms
- 6. Connect people with similar tastes in decor over the Internet A
- 7. Offer a color matching guide showing new decorators what colors work best together
- 8. Create a guide of surprising decorations that people typically don't think of
- 9. Interface with popular messaging apps that easily allow sharing with close friends. Post photos and people anonymously choose what they like
- 10. Have a game website with a table of images. Users choose the images that they like the most. Users are given rewards e.g. Swag Bucks, coupons, etc. Could be linked with companies that provide decor
- 11. Crowdsource decoration designs to friends on facebook M

Jay:

HMW make resource conservation more interesting/gamify it?

- 1. Having a count of recycled goods and giving users some points or cash to encourage recycling
- 2. Interface with some other popular game to provide points for the other game when a user recycles
- 3. Have restaurants/popular gathering places offer rewards for people with membership at that particular place that show proof of recycling. The restaurant/popular place would have some app with access to a user's camera for showing proof
- 4. Partner with some electrical companies that keep more accurate track of resources than utility companies would. They work with software companies.
- 5. Music as a timing tool to educate people on how long resource heavy activities take

 AYM
- 6. Magically find out and give points when people conserve resources in the day to day activities and give discounts at shops MY
- 7. Dim lights based on music or mood of the room
- 8. Notify people of their resource usage everyday (water, paper, electricity, etc)
- 9. Use music to time showers and offer rewards when people use fewer songs
- 10. A game that keeps track of the tasks you have done to conserve resources
- 11. Popularize conservation by organizing competitions for people to participate in resource conservation

Final 3 ideas:

1) Music as a timing tool to educate people on how long resource heavy activities take

- 2) An amazon echo like device remind and keep track of to buy lists (and expired food) and make orders on instacart
- 3) Magically find out and give points when people conserve resources in the day to day activities (and give discounts at shops)
- 4) A VR system that invites friends to virtually for work on home decoration together