

Virtual Possessions Project

The Process of Building a Teen's Bedroom

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/ Project Overview

We live in a world increasingly filled with virtual possessions. We characterize virtual possessions to include the many objects that are losing their lasting material form, such as books, music, photos, plane tickets, and money. In addition, we also consider them to include things that never traditionally had a material form, such as video game avatars; electronic messages including email, SMS, IM and status updates; social networking profiles; personal behavior logs, such as purchase histories; visited locations from services such as brightkite.com; and a listing of activities, such as jogging routes from MapMyRun.com. It appears that the convergence of social and cloud computing, along with the growing presence of mobile media players and networked mobile phones/computers has produced a new world in which people both carry and ubiquitously access large collections of virtual possessions.

HCI researchers and practitioners have focused on how the digital can improve performance in terms of efficiency and effectiveness, however little work has investigated how the form and presentation of an immaterial thing might modify its value. This research project takes a step towards better understanding (i) ways in which technologies might enable people with richer opportunities to construct value with their virtual possessions, (ii) how virtual possession might be more meaningfully materialized in people's everyday lives, and, importantly, (iii) the potential social appropriateness and acceptability of these kinds of technologies as we look toward near future design opportunities.

We focused on teenagers as an initial group to begin exploration in this emerging space for 3 primary reasons. They are deeply occupied with the process of constructing their identities; they are heavily engaged in digital media, online communication, and use of interactive technologies; and they are on the vanguard of social and cloud computing, embracing these emerging technologies and actively defining the behavior and social mores of these products. In what follows, we describe the process through which a teenager bedroom was constructed, as well as the script and attendant screens for the enactments we engaged teenage participants in.

/ Environment

1. Bedroom Setup

In order to observe teenagers' natural interactions with technology in their bedrooms, we sought to design a "singular" bedroom that is not generic. We aimed to create a specific, detailed bedroom that evokes the feel of the teenagers' real bedrooms back home. Our choices are based off of photographs obtained from prior research in teenagers' actual rooms.

A challenge we immediately encountered was the sterile and utilitarian atmosphere of the academic building we were using for our study. To mask this, we hung bamboo blinds to section off a corner of the room and made a white-paneled closet door out of foam-core. It made a significant difference.

We intentionally selected mismatching and old furniture. We decided to steer clear of Ikea-style furniture in favor of clunky, robust furniture that looked like they have been around for many years. We purchased lamps to give the room warm, natural lighting instead of the cold fluorescent bulbs of the office.



2. Décor

Posters lent immediate characterization to the room. However, they were also the most tricky to pick out. Decorating the room for a specific age range is challenging. Teenagers are very sensitive to how they appear. Artifacts in the room could not be too juvenile or too mature.

We decided that the Black Eyed Peas were relevant to 14 year olds as well as 17 year olds. Most teenagers are interested in music bands. They are also usually interested in movies, though Avatar may be for a slightly older crowd. However, we are confident with our choices in posters. One participant mentioned that she loved Toy Story 3.

The process of decorating the environment evolved hand-in-hand with the direction of our study. We could not design our scenarios without the space but we also could not design the space without the scenario. For example, the bedspread is white because we decided to project an image onto it and a pattern or any other color would make it difficult to view.





We had to decorate the Bedroom to be suitable for both female and male participants.

With this in mind, we made decisions based on what both genders would find appropriate. Therefore, we chose a poster of the Black-Eyed Peas instead of Justin Bieber.

To support specific genders, we had items in a concentrated location to easily remove for a different gender participant.

For males, we had a war strategy computer game on the desk and a bulletin board designated for boys. For females, we had makeup and jewelry with a bulletin designated for girls.

We also purchased used dolls, birthday cards and random trinkets from Goodwill to give the impression that an actual person lived there.

And for the finishing and unifying touch, we scattered crumpled papers around the room because most teenager's room is messy.

/ Script & Roles

Our process of running participants is far from a controlled, formal experiment. We are attempting to draw out the nuances and inarticulated reactions to technology in potential futures. We value qualitative data. Therefore, our script is intentionally flexible to allow for spontaneity. The dialog and sequence within the script is a guideline. It has been a convenient order of events but straying from it is acceptable and even encouraged.

To run the study, we found that a minimum of two people are needed. Each person plays two separate roles. The main researcher will be the interviewer as well as the "Mom" or "Dad." The research assistant explains the scenarios and environment and also plays the "Confederate."

The Confederate acts as the participant's friend in a few scenarios. Her role is to set an example for the participant in acting out imaginative roles. More than adhering to the script or an experimenter's role, the Confederate should put

the participant at ease. Hopefully, candidness will encourage the participant to follow suit and begin visualizing the scenario as her own.

Most of the enactments depend on the participant. There are some teenagers who are creative and will elaborate on a scenario with their own interpretations. Others are very quiet and will not be as descriptive and comfortable with acting out their role. Regardless, our study has yielded interesting results.

DIALOGUE: BEDROOM TOUR

- Welcome to the Bedroom!
- Role: You are acting as if this is your room.
- Integrate room décor into participant's role: You are into the Goo Goo Dolls. You like Toy Story 3. You like sports.
- Here are the screens. This is all your texts, emails, and calls. There's Goo Goo Dolls. Photos from Facebook.
- Scenarios: We'll prep you for each scenario and tell you what you are acting out. Do what you would do if this was *your* bedroom.
- Try to reflect and think about how these things would

- fit into your life. After each scene, we'll ask some questions.
- No right or wrong answers. We want to see what you think.
- Questions?
- Turn off your cell phone and keep it on table.
- In return, here is a new phone for you. To read texts, just peel off post-its. Here is a "Mom Button" for the screens. If you want to change the screens to something more mom-friendly, press this button.
- So! Let's start our first scene!



The study begins with greeting participants, giving a tour of the bedroom (dialogue above), and handing them props used in the study—a cell phone and "Mom Button" made out of foam-core.

/ Scenes

1. Socially Reactive Bedroom

For many teens, their interests and experiences are captured in the form of virtual data—music, photos, messages exchanged with friends, etc. In this enactment, such data is presented on the wall screens in the bedroom and changes depending on the context. We broke the scenario into three parts to establish various contexts: when the participant is alone in the room, when a friend visits, and when mom (or dad) enters the room. The goal was to understand 1) if the data displayed on the wall is perceived differently than when it only exists online and is accessed through mobile devices or computers, and 2) what kinds and how much of the data participants feel comfortable being displayed for others to see or keeping private.

Script

DIALOGUE: EXPLAIN SCENE

- You have a test on Romeo and Juliet on Friday.
- Your friend, who will be played by me, is coming over really soon.
- Right now, you're at dinner with your parents. 2 buzzes on your phone- can't check it now. Dinner over- going back to your room.
- Go study!!!

IN THE SCENE

1-1. Default Screen and Personal Notifications

- Screen with text notifications already up.
- Participant enters bedroom alone.
- After participant checks each message, fade screens.

1-2. Similarities / Differences among Friends

- "Friend" knocks. Enters.
"Hi! Hope you finished the reading. We have so much to study!"
- Slowly update screens to friends. Sequentially change.
- "Friend" looks at the display.
"Oh! It's me now!"

"What's that? [communication visualization]"

"Wow, we talked about EMILY/JOE that much? And Romeo and Juliet. I'll be happy when this test is over."

"Remember when we watched that? So fun."

"Halloween! Wow, that's when we didn't even know each other!"

"That party last month was SO fun! But I hope your mom doesn't find out about that..."

"That girl's pretty hot. / Nice abs on that guy."

1-3. Parent Button

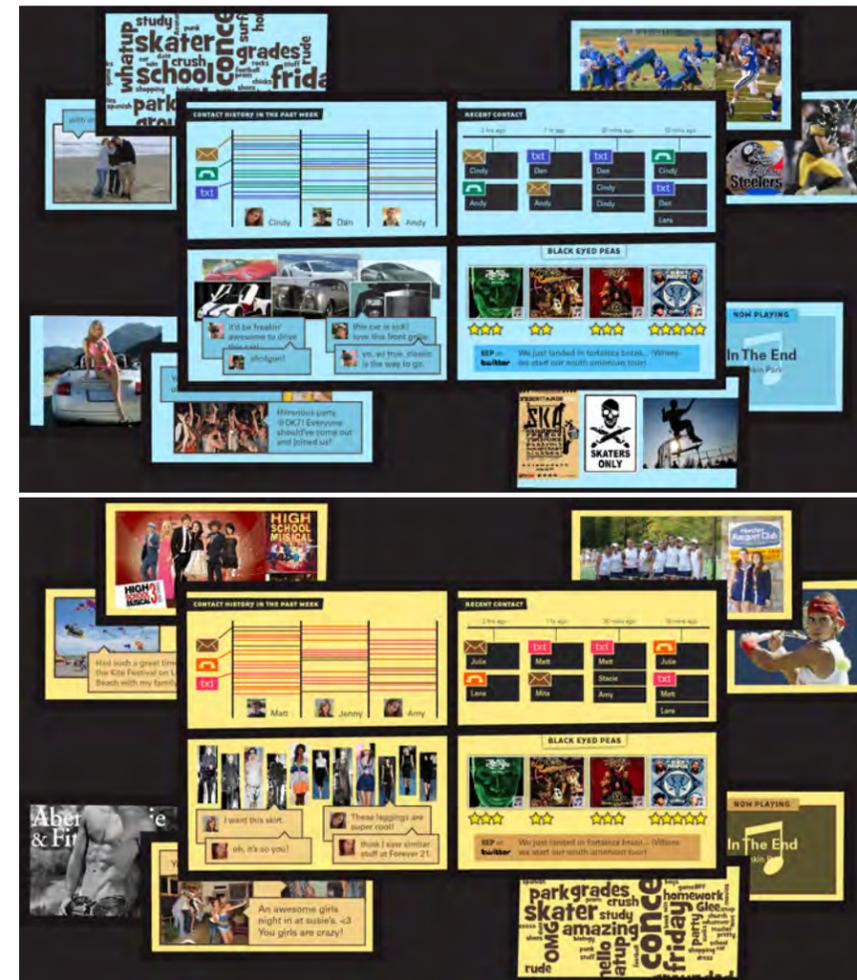
- "Mom" (or "Dad") knocks.
"[Name]! I have your laundry! Can I come in?"
- Friend waits to see if participant will go to the remote.
"Quick! Get the remote! Change the screens!"
- When Participant presses button, change to "Parent Screen".
- "Mom" (or "Dad") enters.
"I'm coming in now... So how's studying going?"
- "Okay, have fun studying, you two."
- "Mom" (or "Dad") walks out.

1-1. Default Screen and Personal Notifications



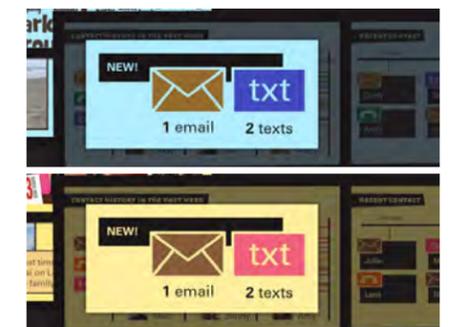
For the first part of the scene, the participant enters the room alone, checks the text messages and is given a chance to look at the screens. By creating a context where they have an exam to study for, we intended that the screens would not draw her full attention, but rather existing as an ambient fixture just like other furniture or posters on the wall.

Screen Design: Boy's (top), Girl's (bottom)

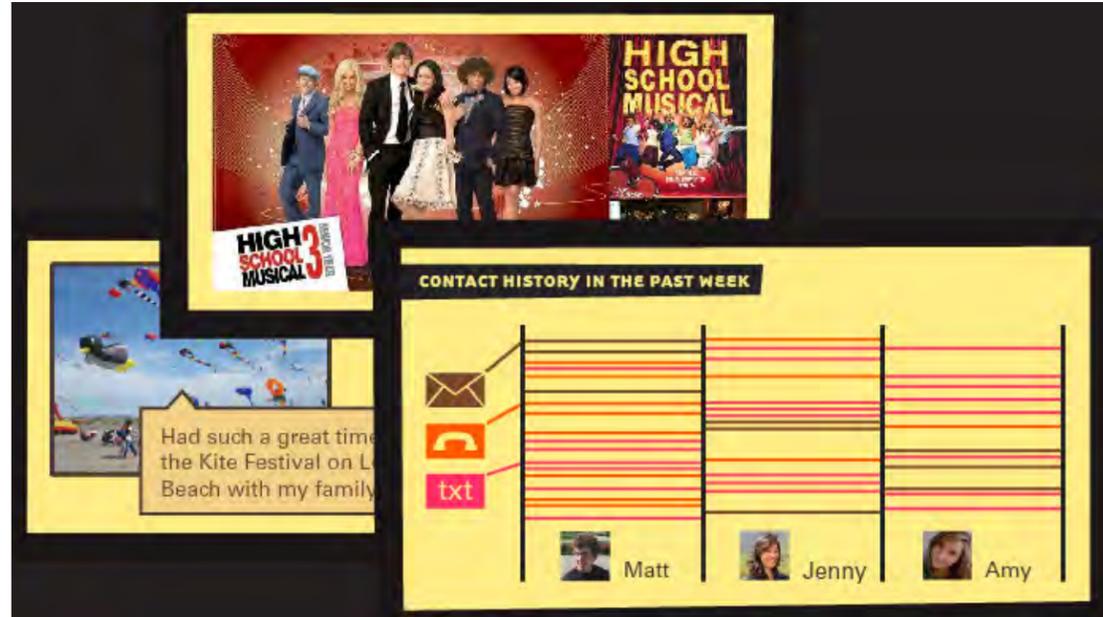
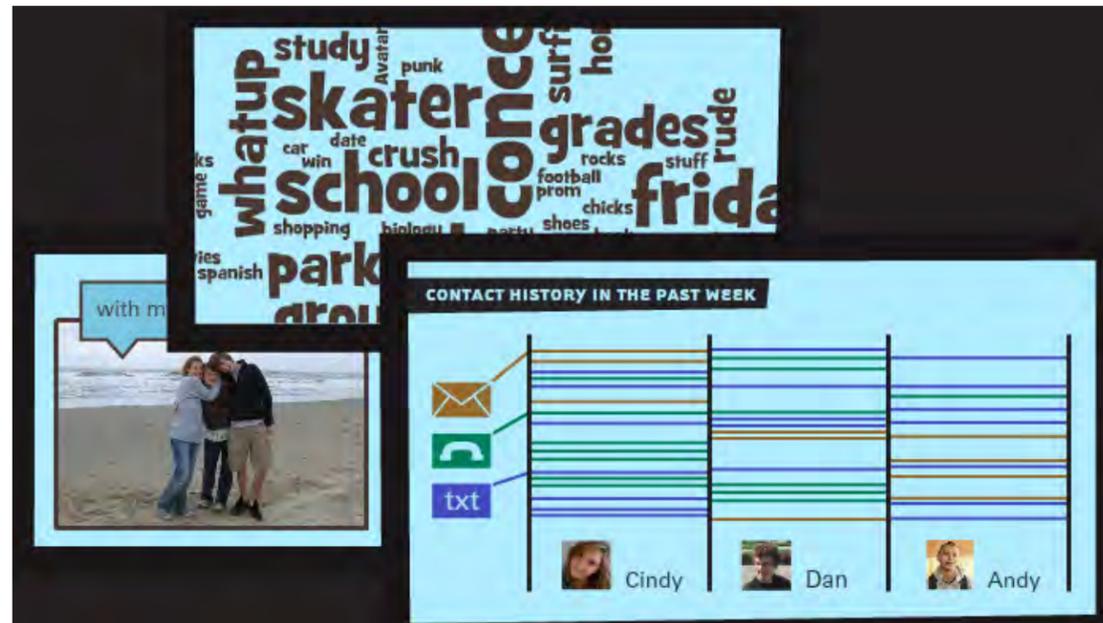


Most of the design is identical for boy and girl participants except for the color scheme and some content that fits one gender but not the other.

We observed the participant in the room and had the message notifications (images below) disappear after she checked the messages.

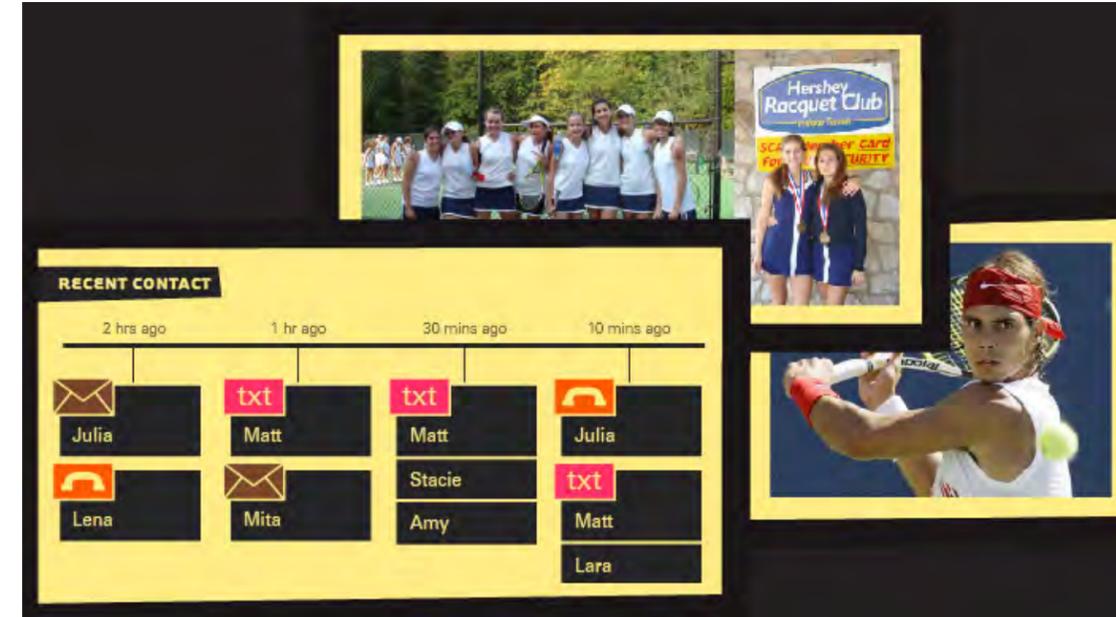


Screen Design: Boy's (top), Girl's (bottom)



The screen at the top most layer shows the contact history between friends. It is rather abstract to give participants a feel for how the system could provide the information that they might not be aware of: the frequency and the pattern

of their communication with friends. Other screens show the photos and posters from a TV show popular among teen girls, and the word clouds of frequently used words in participant's text and email messages with friends.

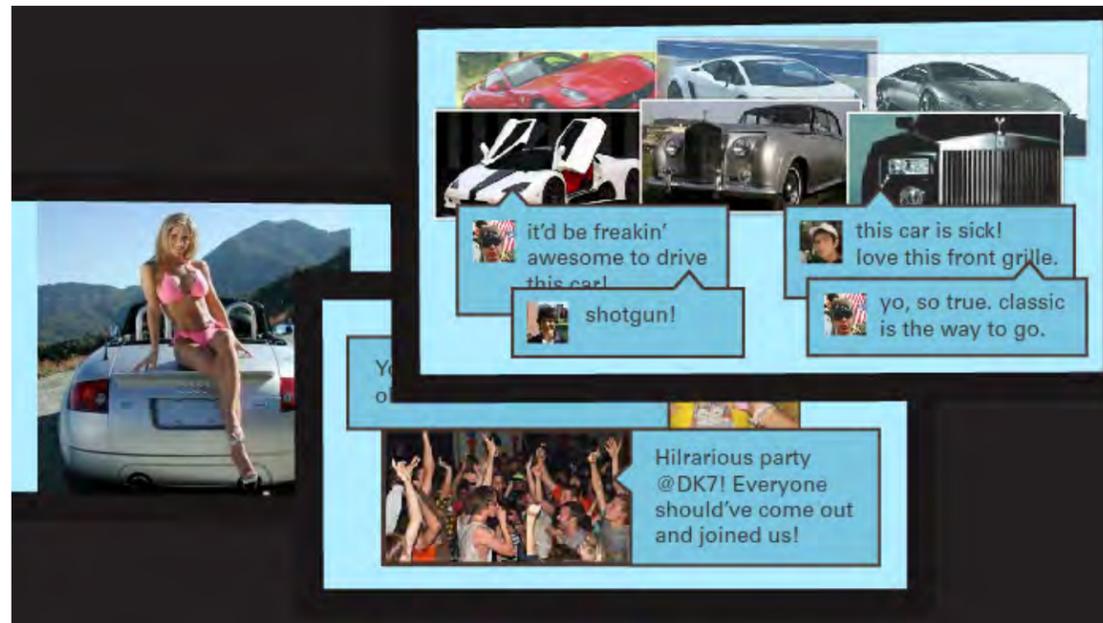


This top right portion of the wall screen displays the recent contact information: sender's name, message type, and received time. Similar to the contact history screen on its left side, this reveals the participant's communication pattern. The icons and simple timeline were

used to help participants quickly grasp the gist of the concept on this screen without having to spend a long time reading it, which would interfere with the flow of the scene.

The bottom layer screens display the photos of participant's sport activities. Without any captions or comments, these photos meant to sit back in the background as the photos in the physical photo frames do in many teens' bedroom.

Screen Design: Boy's (top), Girl's (bottom)



These screens contain the images that reflect participants' interest, conversations around it with friends, and the content "not safe for parents." These include the photos and comments from parties, and the images from commercials that parents could disapprove

of having displayed in their kids' room. These images were intentionally chosen to test the idea of giving a control to instantly switch the screen content in the presence of parents (tested in the third part of this scenario, "Socially Reactive Bedroom").

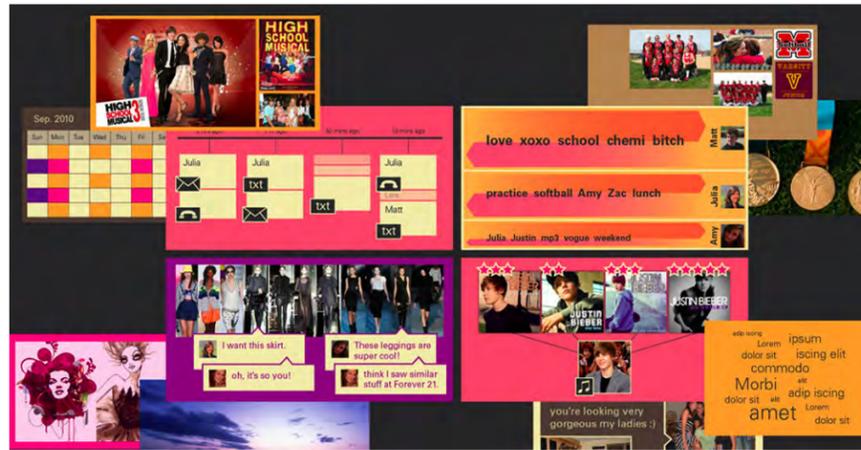
The collage-like layout was used in the top most screen to mimic the physical collage teens often create and display to decorate their bedroom.



This part of the screen is mainly devoted to the music related content: the album covers and the tweets from the artist and displays the song currently playing.

"Now Playing" screen was intentionally kept simple to avoid visual clashes with other more prominent screens.

Initial Sketches



The calendar in the left most screen was intended to remind participants of events and activities and help them with scheduling. However, the previous research revealed that teens rarely have a systemized way of managing their schedules. This made this content irrelevant. As a result, this screen was changed to display family photos.

The contact history was displayed in the top right corner screen at the top layer. It

contained frequently used words placed on top of the lines whose thickness denoted the amount of communication. In this design, the clarity of information seemed to be sacrificed in favor of keeping the screen simple and abstract. To solve the problem, label and icons were added in the final design.

The top right corner showed the participants' the sport activities. It was changed from softball to tennis to be

consistent with the scenes used in the scenario 5, "Multiple Self Presentations."

The look and feel of the word cloud in the bottom left corner was not *real* enough—only slight changes in font size and a monotonous layout. Later, using "Wordle" (<http://www.wordle.net/>) allowed us to generate a more plausible design with little effort and time.



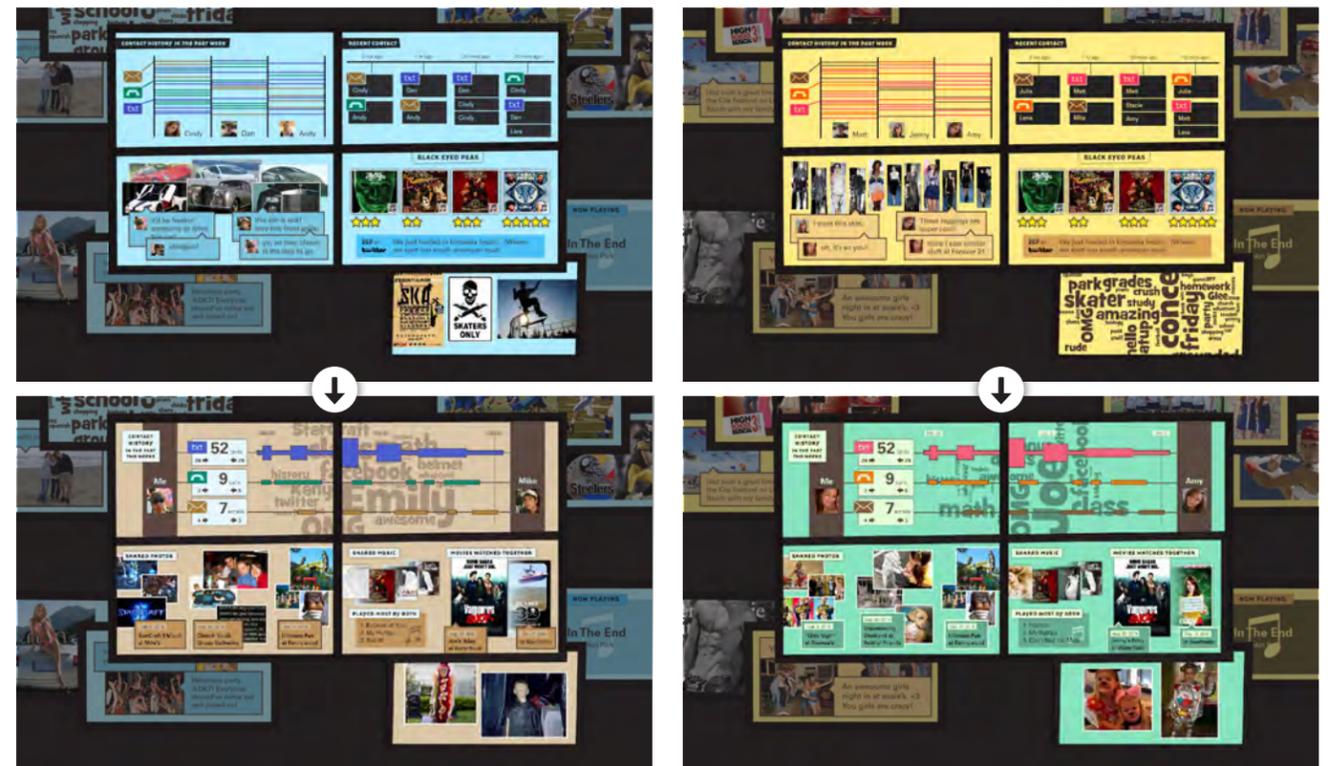
Each set of screens (left: boy's, right: girl's) used two different background colors. This seemed to distract the viewers and take the focus away from the changes in content that happened at

each time a new scene was introduced. The final design reduced such a visual noise by applying one background color to all screens.

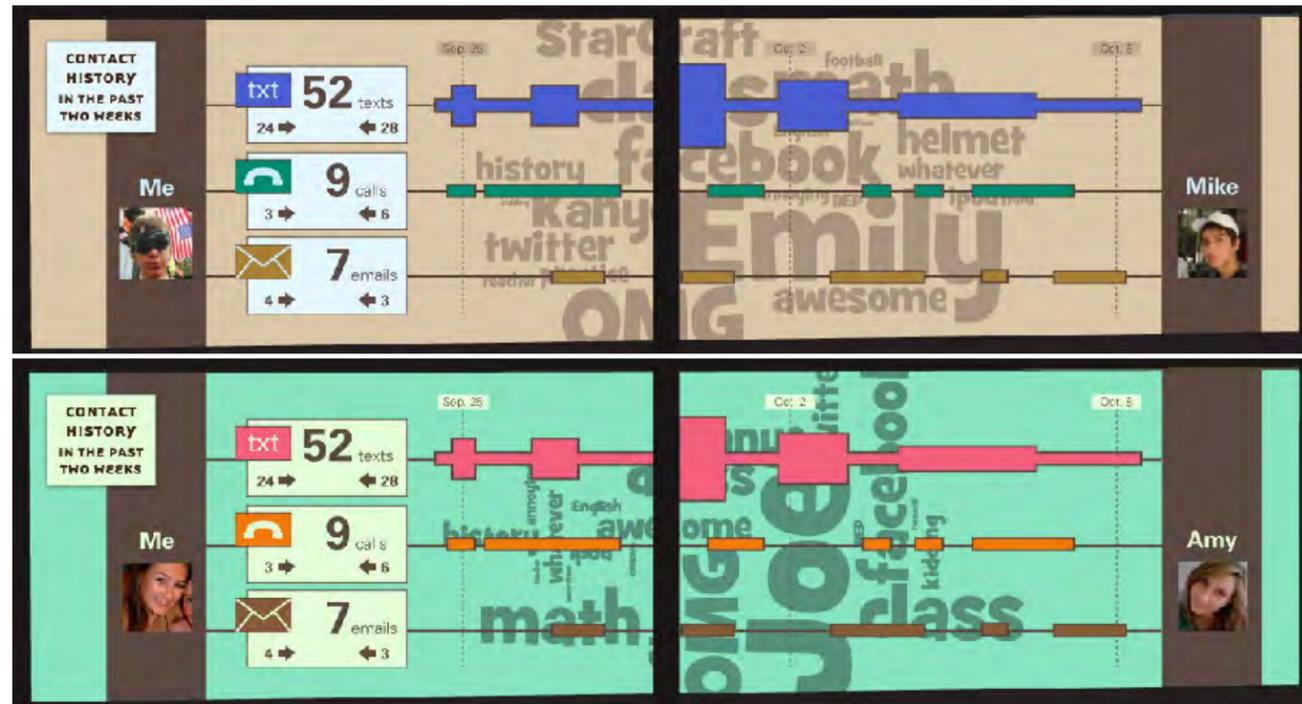
1-2. Similarities and Differences Among Friends



In this scene, when the friend enters the bedroom, the wall screens transition to the content about the contact history and the shared experiences between the two. As the images below show (right: boy's, left: girl's), most of the peripheral screens remain the same and the center ones and the one in the bottom right corner change. To differentiate these screens from the ones that stay, a different background color is applied.



Screen Design: Boy's (top), Girl's (bottom)



In the contact history section, the frequency of communication is visualized in an abstract form and the word cloud of frequently used words is displayed in the background. The icons and the color

scheme are carried from the default screens for consistency. This aims to surface the communication pattern the two friends may not be aware of, helping them reflect on their relationship.

Screen Design: Boy's (top), Girl's (bottom)

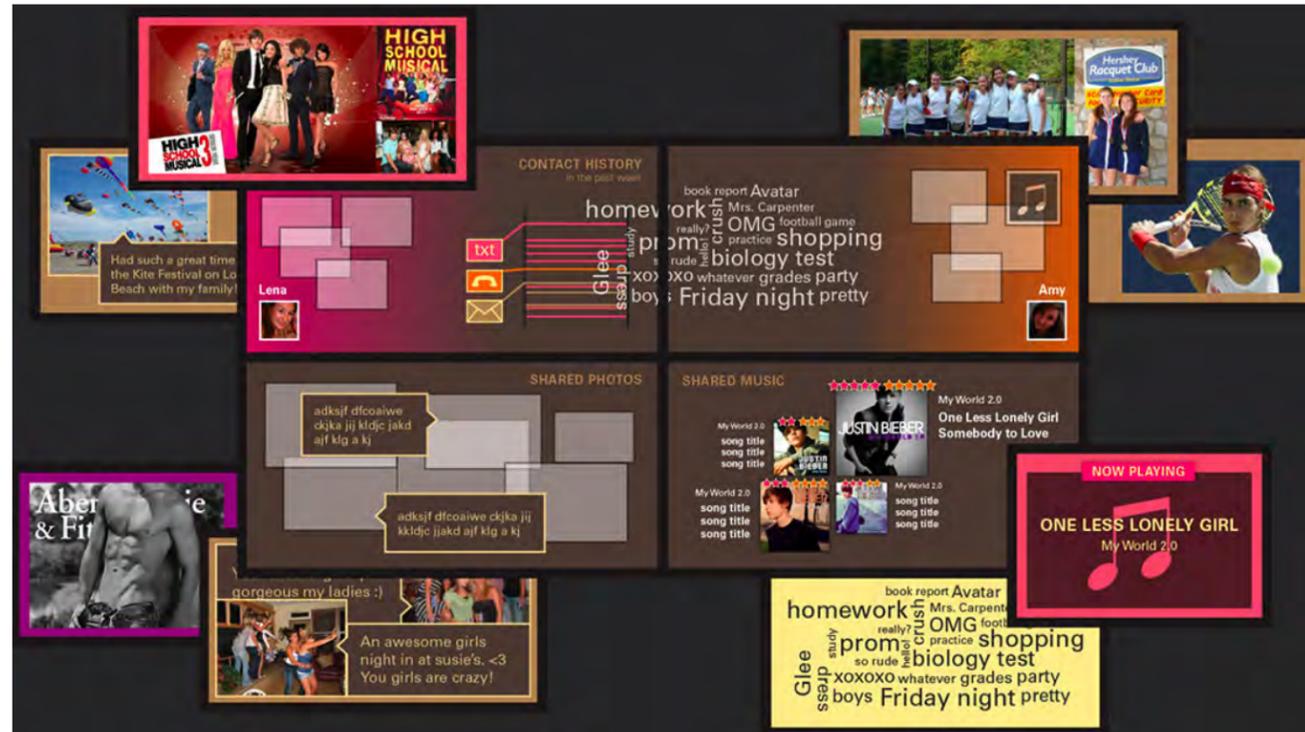


The top two screens contain photos and images that remind the two friends of the experiences and interests they share with each other. Most of the content is associated with a specific event as a reminiscence of their past and a trigger for a conversation.

The bottom screen displays the photos from the past when the friends did not know each other. This aims to find out if teens would feel comfortable with and see values in the idea of system's digging the data from their past and displaying, and if so, how far back would be appropriate.

The design of these screens, consistently with other ones in this scene, takes a form of simple photo frames laid out like a collage.

Initial Sketch



In the initial design, the screens for this scene (friend's visit) did not make a clear visual distinction from the rest. This seemed to scatter viewers' attention. Even within the screens containing the contact history, the lack of clear hierarchy added to this visual clutter.

The shared photos section was changed so they are event based instead of a collage of random photos.

The selection of the artist, Justin Bieber, was changed in the final design because it did not seem to appropriately reflect

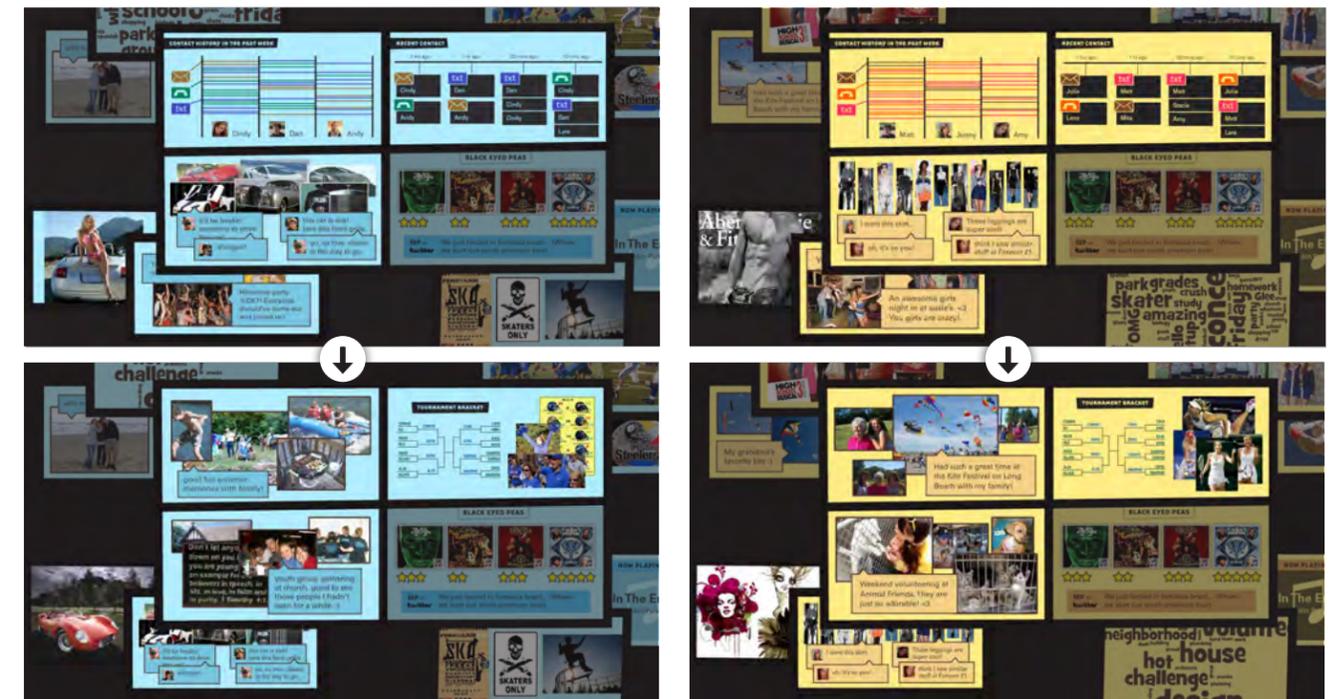
the interest of the teens who were in the age range we targeted in this study, 14–17.

1-3. Parent Button

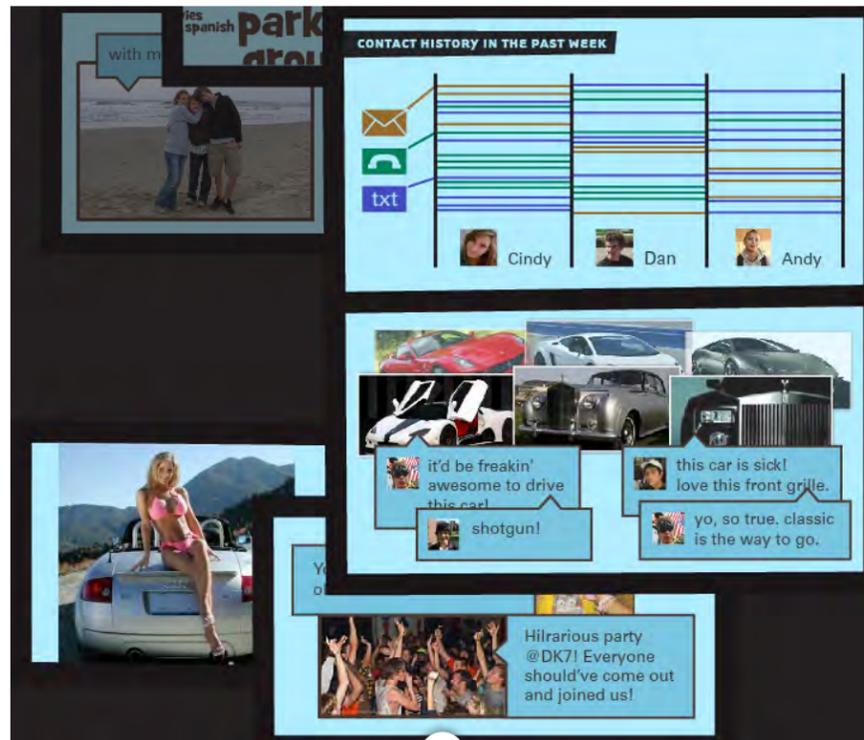


In this scene, while the friend is with the participant, mom (or dad) knocks on the door to drop the laundry. The friend hints at using the "Parent Button" to switch some of the content the participant may not want her parents to see.

Some screens switch back to default and others, as the image below highlights (right: boy's, left: girl's), change to display the content more appropriate for parents.



Screen Design: Boy's



This transition of the screen is meant to display the content that is "ok" for parents to see; the contact history is replaced by family photos; the church group activity photos replace the party photos and are promoted to the top layer screen; the image with a girl in bikini was replaced by a car poster.



Screen Design: Girl's



Like the boy's screens in the previous page, the content on the girl's screens changes in the presence of parents; the contact history is replaced by family photos; the volunteering activity photos replace the party photos and are promoted to the top layer screen; the image with a shirtless guy was replaced by the two girly illustrations.



2. Bedroom Quilt

This concept tests the idea of aggregating a teen’s social information in an abstract heat map embedded in their quilt. The quilt would reflect information in real time, which might include new photos or wall posts on Facebook, text messages and emails. We were trying to understand boundaries and values of having your personal information wrapped around you and always present while you were sleeping.

Script

PREP

- Switch computer projector cable to bed projector.
- Project quilt screen on bed spread.

DIALOGUE: BEDROOM TOUR

- Bed spread fabric itself changes colors.
- Bars show status updates (texts, photos, Facebook, emails) and change depending on how many unread items you have.

DIALOGUE: EXPLAIN SCENE

- You just got home and are going to bed.
- When you enter, kick off your shoes, turn the light off.

- Then get into bed and pretend you’re going to sleep.
- In the morning, “Mom” will wake you up to get ready for school.

IN THE SCENE

- Participant walks into bedroom alone.
- After Participant gets into bed, update quilt bars.
- Mom knocks. “[NAME], get ready for school! You’re gonna miss the bus!”
- Participant gets up and sees new screen. Turns lights on, puts on shoes, runs out.

This enactment takes place in the evening after dinner. Teen participants turn off the lights and go to bed. The enactment only lasts for about five minutes, during which time the bedspread gradually grows brighter to reflect incoming information.

This enactment has not produced much reaction as we would have hoped. We hypothesize that this could be for a variety of reasons. First of all, we were trying to simulate dynamic graphics that would be embedded in the fabric of the bed. Because we projected it from above, the light source was very intense and thus perhaps felt too present. The goal was for the information to be subtle. Additionally, projecting information on a bedspread might not have been the best location.



Bedsread Design



The final design is a simple bar chart with large type. Using bars as a pattern maintains the feel of a real quilt that might be found on a teen’s bed. Adding labels to each bar in a large type size adds playfulness, but also aids in ex-

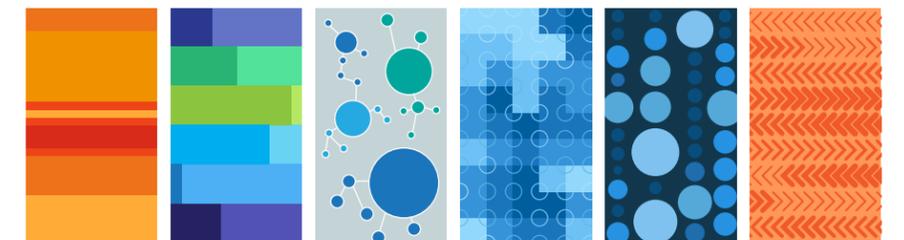
plaining the content and context should the participant forget while in the middle of an enactment.

The graphics begin as dark, subtle pattern, suggesting no new content. Over

time, three of the bars grow bright and vary in height. The final state of conveys that the teen has new content on her wall, new photos and new email.

Initial Sketches

The design needed to be gender neutral and teenager appropriate. In other words, not too child-like yet simple and graphic to convey dynamic information. I explored a variety of techniques for showing emphasis and change including color, scale and weight. Some of my inspiration was Marimekko patterns



3. Gift Giving

This enactment aims to find out how teens perceive the value of virtual music playlist gifted from friends when it is made present in their physical environment; the playlist is displayed on the wall screen with associated data curated by the gift giver that reminds the experience shared between friends.

Script

PREP

- Project gift-giving screen.
- Have songs ready.

DIALOGUE: BEDROOM TOUR

- These screens are when you are listening to music.
- You can see what's "Now Playing".
- A friend gave you this playlist as a gift. They specifically put these pictures and comments in for you.
- These are other playlists from friends. You can see shared songs and playlists between you and your friend.
- This corner is album artwork and word clouds of the song. And this corner is all your other normal playlists.

DIALOGUE: EXPLAIN SCENE

- You're about to go to a sports game with your parents and your friend's going to join you soon.
- So now you can go into your room and listen to music!

IN THE SCENE

- Start music as participant enters room.
- Friend knocks and walks in.
 - “Sorry, I’m a little late. Your parents said we could wait a few more minutes. They’ll call us when it’s time to go.”
 - “Oh, I love this song!”
 - “I forgot how fun that trip to Kennywood was! What’s this? I didn’t tag these [map, weather].”
- Wait another 30 sec. Mom knocks.
 - “Okay guys! Time to go!”



Screen Design



The overall color scheme and the choice of musician, Black Eyed Peas, intended to be gender neutral. Along with gifted playlists from friends, other music-related contents such as album arts and word cloud of lyrics are displayed.

In the scene, one song from the gifted playlist is playing. This primary part of interface shows what is currently playing, "I Gotta Feeling," and the content that reminds the shared experience with the gift giver. Some are curated by the gift giver such as photos and comments, and others are generated by the system such as weather and location information and lyrics word cloud.

In an attempt to avoid being rigid or monotonous, the design uses a radiating form of layout. This helps portray the human touch put into creating the playlist for a friend.



The top right corner of the interface is devoted to displaying “My Playlists” and a word cloud of lyrics from one of the songs. As secondary content, its design intends not to interfere with the main part of the display—the song currently playing and the associated content.



The three screens on the top left portion of the wall display shows the images related to the currently playing song. This includes album arts, concert posters and other photos of the artist.



In the bottom left corner are “Playlists from Friends” and a simple information graphic that compares gift giver’s and my playlists—how many songs and playlists each has and how many are shared.

As the purpose of the study is to test the boundary of acceptance of new ideas, the content and the exact way it is displayed per se is not meant to be evaluated. The simple design here gives a enough feel for participants to see how the screens might look, steering them away from getting caught in the details.

4. Postcards

In this enactment, the teen participant is hanging out in her room and her mom brings her some mail, which includes two Virtual Possessions postcards.

The postcards help to remember the past by gathering information from the web about a participant’s past. The postcards include photos, facts, quotes and stats both positive and negative.

Our goal was to understand the concept of making the virtual, tangible, which was a finding from past research about teens printing out photos or conversations. We were also trying to understand the value of metadata automatically constructed by a computer versus information that is personally collected and curated by the user. We were curious to learn if the computer generated postcard felt creepy like Big Brother, or if it provided useful and nostalgic information.

Script

PREP

- Power down both projectors.
- Get postcards together, along with other mail.

DIALOGUE: EXPLAIN SCENE

- You’re going to get some postcards that will be automatically generated from your computer and mailed to you.
- It will have a summary of your activity and a picture.

- Your Mom is going to drop off some mail. Sort through those and look at them.
- Now you can go into your room and read a book.

IN THE SCENE

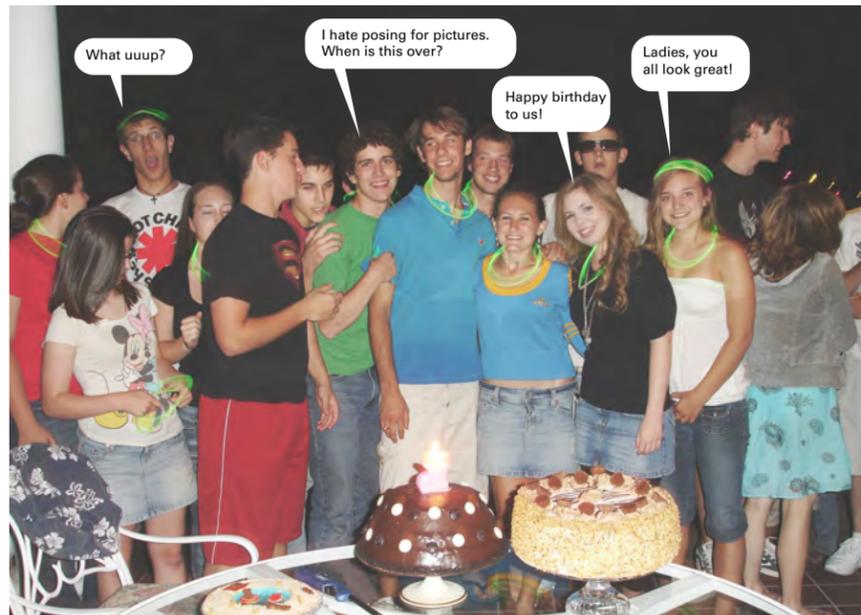
- Participant enters room.
- Mom enters.
“Here’s your mail. Make sure you don’t throw anything important away...”
- Wait for Participant to look at postcards.



Postcard Design

The voice of the postcards are conversational yet high level enough to make it believable that it was pulled off the internet by a computer.

Two postcards are used in the enactment. The event on each postcard is a positive memory. However we made a negative postcard about an event that was rained out and included negative comments. That postcard was introduced during the debrief to compare it against the positive postcards.



Postcard #1

The idea for this postcard was to feel similar to the tagging device in Facebook. Adding quotes from the kids in the photo would be a layered piece of metadata and also add to the nostalgia of the specific event.

The back of the postcard was intended to feel like similar to a baseball card with quick statistics about the teen which could be scraped together from the internet.

IN 2009...

You listened to the **Black Eyed Peas** 1034 times.

You had **145 friends** in your social networks.

You tagged **78 people** in photos.

You were tagged in **38 photos**.

You untagged yourself from **9 photos**.

You 'liked' **Steven Miller's profile contents** the most often.

You sent the most emails to **Samantha Davis**.

You responded the least frequently to **Ben Smith**.

To: _____



Postcard #2

The second postcard was intended to be a negative memory where the teen's event was rained out, hence the dreary photo on the front. During the process we decided to make this postcard a positive experience instead. During the enactment we give the teen just one of the postcards and then show the opposite postcard during the debriefing.

One thing we might consider moving forward would be to match the positive experience with a positive photo rather than a rainy scene.

On October 12, 2008 you:
Went to Cedar Point amusement park.

You invited 8 friends.

3 friends attended:
Kelly Johnson, Jill Medvez, Kim Glassman

The weather was:
Thunderstorm; 65F

You commented:
"Hey sorry for the bad weather. Maybe we can go again next year."

Your friends commented:
"Rain sucks." "Are we doing this again next year?"
"We should've gone to the Steelers game"

Other events happening on November 12 2008:
Pittsburgh Steelers vs. Cleveland Browns;
Pennsylvania Chili cook off; Downtown Arts & Culture fare

On November 12, 2008 you:
Went to Cedar Point amusement park.

You invited 8 friends.
5 friends attended:
Kelly Johnson, Jill Medvez, Kim Glassman, Nathan Gilbert, Jeff Smith

The weather was:
Partly Cloudy, 75F

You commented:
"Hey what an awesome time. Remember how scared Kim was at the top of all the coasters!?! LOL. Lets go again next year!"

Your friends commented:
"Are we doing this again next year?? Will Kim come LOL!"
"I'll come but never to the top of some of those rides again!"
"The funnel cakes were sooo good... next time I'll try not to drop mine on Jeff!"

Other events happening on November 12, 2008:
Pittsburgh Steelers vs. Cleveland Browns
Pennsylvania Chili cook off, Downtown Arts & Culture fare

Other friends visiting Cedar Point amusement park in 2008:
Jenny Davis, Sam Jenkins, Marlow Conway, Winston Matthews,

Celebrities visiting Cedar Point amusement park in 2008:
Ben Rothelsberger, Justin Beiber, Brittany Spears, Kings of Leon

To: _____

negative memories

positive memories

5. Multiple Self Presentations

Teens often project different selves to various groups of people in their lives. When currently manifested on Facebook, teens censor their comments and expression for all groups even though in person they may act differently. For this enactment, we were exploring how a teen's multiple selves would look if they were all visible in one place.

Script

PREP

- Project multiple self presentations screen.
- Foam core phone for text messages.

DIALOGUE: BEDROOM TOUR

- These four screens are four profiles you have on Facebook. Each is an aspect of who you are.
- So this corner is your sports team and these are the photos, comments, etc. that your teammates can see.
- This one is for your family. This one is for your social group and this one is for school.
- The screens update when you change things online.
- When you receive any texts or email, the screens will let you know.
- You can check your phone by peeling off a Post-It for the next message or check your laptop.

DIALOGUE: EXPLAIN SCENE

- You're going to be reading in your room.
- You might receive some texts or emails. When you do, you can just check them. How do you do that again?
- Okay, great. Go ahead!

IN THE SCENE

- Participant enters room.
- Trigger incoming text sound. Change screen to text alert.
- Once Participant checks it, go back to default screen—swoop into text visualization.
- Trigger another text. Change to text alert. Back to default screen when participant checks.



Screen Design



The wall display includes four personas, each with three screens. Each persona is differentiated by color, labels, content, and profile picture. The different personas—represented by four photos of the

same teen—are symbolically unified in a circle at the center of the display. Although each quadrant incorporates persona-specific content, the overall display is intended to feel messy yet

curated. Some parts should feel like a bulletin board and other parts feel like posters.



Content that appears on the wall display is not specifically defined, but might be pulled from digital devices and the web. For example, text messages might be aggregated into a tag cloud or upcoming events would appear.

The displays also suggest hierarchy based on time. Content in the fore-

ground is newer than content in the background. Also, the smaller displays on the periphery of the display do not contain time-sensitive information.

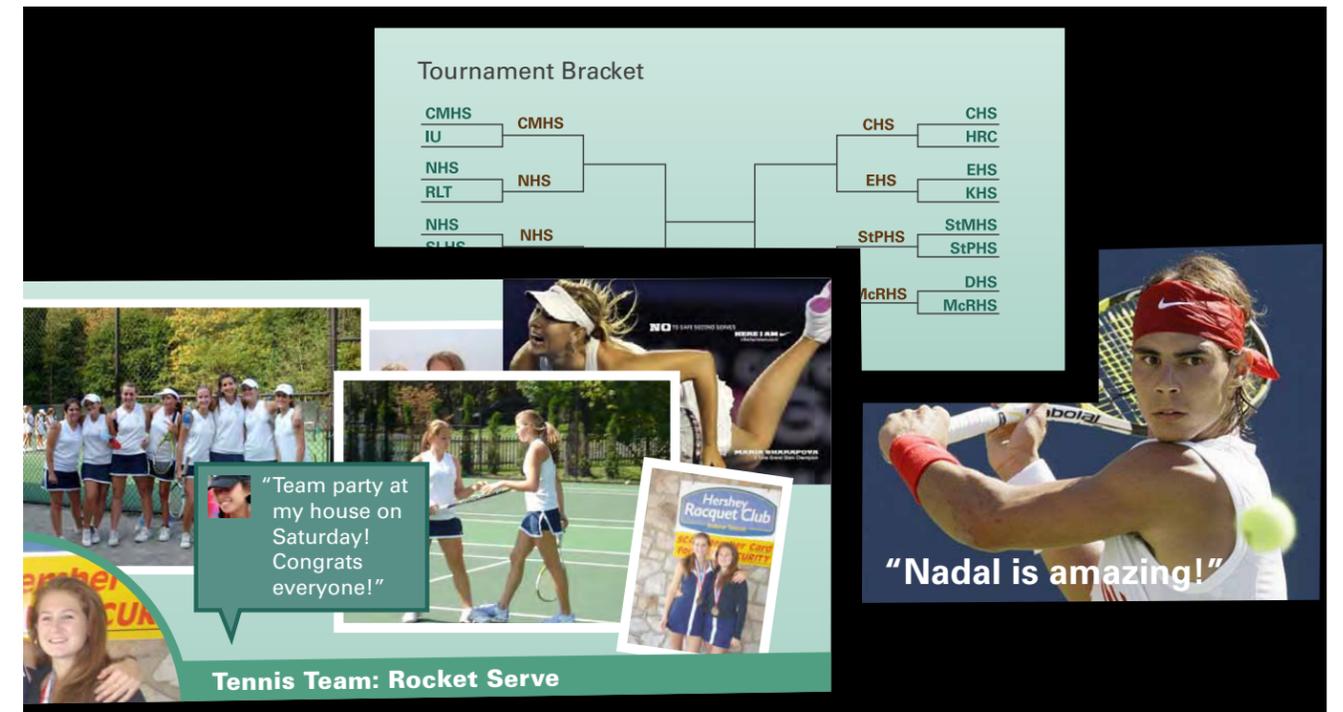
Additionally if a student has incoming text messages or email, the quadrant specific to the sender will highlight.

During the enactment, the teen receives a text message from two different friends. Receiving a message will highlight that quadrant in yellow and dim out the other quadrants. This device reinforces the idea of four different personas

Screen Design: Girl's



This is the family persona. It includes content that is safe even for grandma to look at. The photos chosen were happy and sunny. In considering the imagery a teen might want to see about her family and her history, we included a photo of an old house. We wanted the family section to allow for reflection and pride about where you come from and what it means to be a family.



This is the sport section. The teenage girl is obsessed with tennis. The larger panel focuses on current events and the teen featured as an athlete. In addition to photos, we included other current information such as a tournament bracket which might help the teen keep track of her standing. Last, to round out the passion for tennis, we included more commercial photos of famous tennis players. This section is not only about the teen playing tennis but also the athletes she looks up to or admires.

Screen Design: Boy's



This is the family section for the boy persona. In contrast to the girl's family section, the boy is depicted with an outdoorsy family. They are always going on an adventure and eating together is an important family tradition. All four color backgrounds vary to support the idea of multiple selves. Color backgrounds for the boy are deeper jewel tones that feel more masculine. In this case, the straw color background was meant to feel like fall, warm and vibrant.



This is the sport section for the boy. He is a obsessed with the Steelers and plays football himself. The images are active and tense. They feature him at practice, but he also has his own cheering crowd of parents and cheerleaders. The color is a jewel-toned red which is more masculine and contrasts the blue jerseys of his football team. Also as a contrast to the active large section, the Steelers logo is meant to resemble a poster on your wall.

