alexkim

DESIGNER

PORTFOLIO

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

About Me

alex kim
DESIGNER

Hi.

My name is Alex and I'm a designer.

The work in this portfolio exhibits some of my projects within the fields of industrial design and interaction design.

Why Industrial Design?

I believe in the capabilities of products.
I love design, but unfortunately not everyone understands what design really is. Since everyone sees, uses, and interacts with products on a daily basis, I think industrial design has a great and destined potential to raise design awareness.

Why Interaction Design?

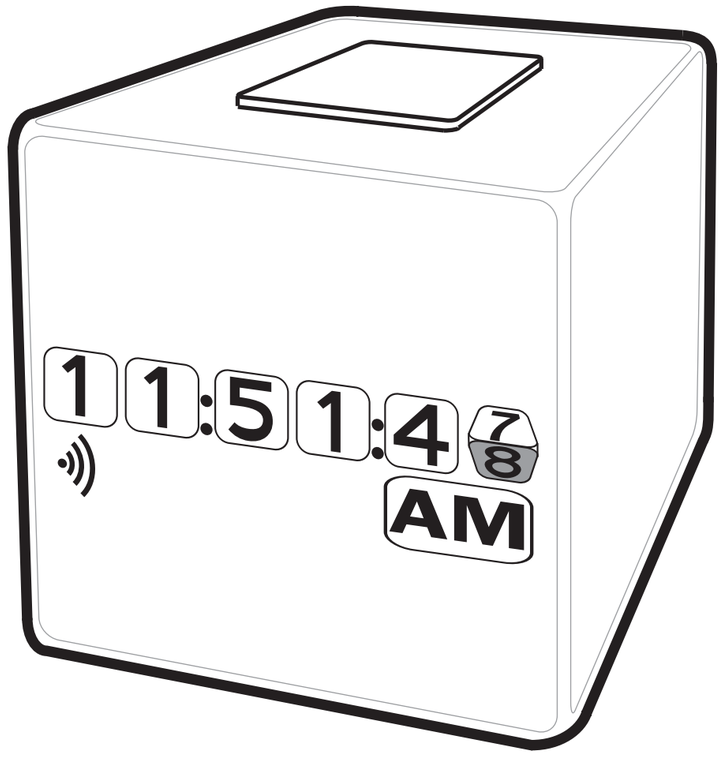
Interaction design gives me a better understanding of our responsibilities as designers, and more importantly the ability to implement this understanding. These responsibilities, which find their roots in usability, reveal a deeper purpose for the design culture as a whole. It is this purpose that drives my desire to find my own personal design philosophy.

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

MOTIONSENSE TIMECUBE

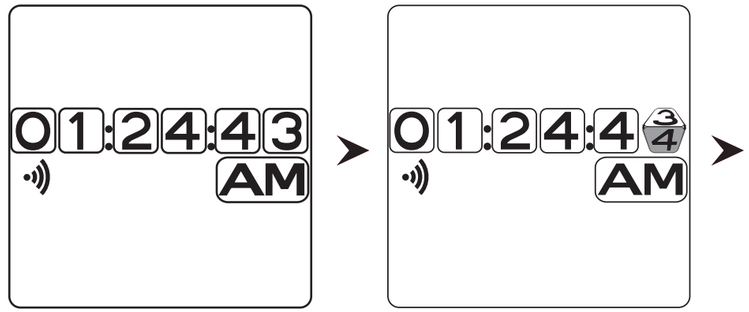
The alarm clock project was a quick design study which required students to develop their concept within a relatively short time span.



Project Description

The initial design problem was to create a travel alarm clock interface. The user had to be able to view the current time as well as set an alarm and respond to it. With only one button and a 3”x3” 72 DPI color LCD screen, a desirable solution had to be found.

The process in this project involved the use of a persona. Personas are archetypal representatives of the target user which are used to create a better understanding of the user’s needs. Once a user was established a solution was developed through an iterative and conceptual cycle. The solution found in this situation was the idea of motion sensitivity.



HIGH VISIBILTY

The use of black on white creates an easily visible high contrast display.

REVOLVING CUBE DISPLAY

Digits are shown on revolving cubescreating a correlation between the physical and digital interface.

PUSH ONCE

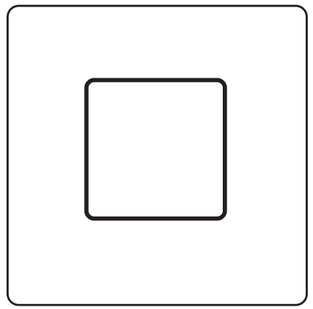
When the alarm and time have been set pushing the button once will bring you back to the current time.

TILT LEFT

Tilting the cube left will let you set the next digit.

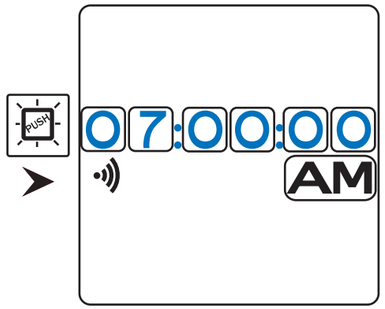
ICONS AND INDICATORS

The bottom row is used for the alarm indicator and the AM/PM box. This provides visible feedback and information.



MULTIFUNCTION BUTTON

Because of its multiple functions, labels were left off of the button to avoid confusion. The users ability to rely on affordances will create sufficient information to use the button effectively.

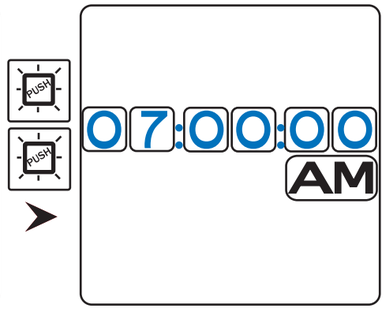


PUSH ONCE

Pushing the button once will display the alarm time.

The alarm display numbers are always in blue.

After five seconds the display returns to the current time.



PUSH TWICE

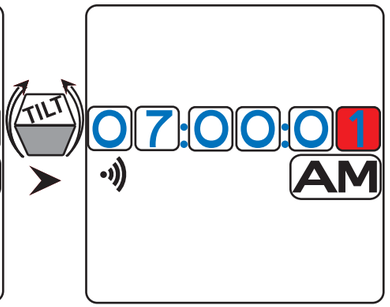
Pushing the button again while the alarm time is displayed will toggle the alarm ON or OFF.

The alarm indicator below the hours will respond accordingly giving visual confirmation.

HOLD ONCE

Holding the button once will allow you to set the alarm time

The last box will turn red and arrows will indicate how to change it.



TILT UP

Tilting the clock away from you will move the alarm time forward

The alarm is automatically set back to ON when the alarm time is being set.

TILT DOWN

Tilting the clock towards you will move the current time back.

TILT UP

Tilting the clock away from you will move the current time forward

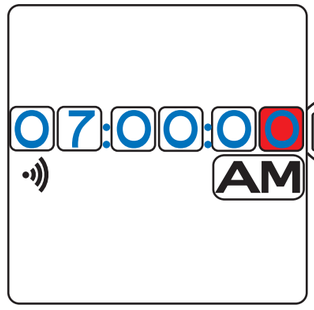
The instructional arrows disappear again.

HOLD TWICE

Holding the button twice will let you set the current time

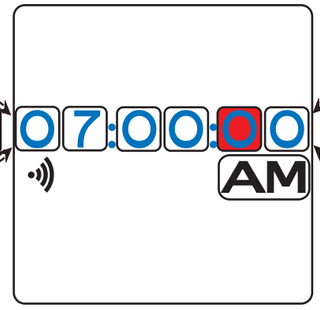
Current time is always displayed in black.

The last box will turn red and arrows will indicate how to change it.



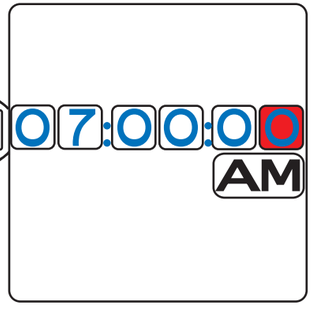
TILT RIGHT

Tilting the clock right will take you back to the previous cube.



TILT LEFT

Tilting the cube left will let you set the next digit.



TILT DOWN

Tilting the clock towards you will move the alarm time back.

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

Contextual Research and Analysis

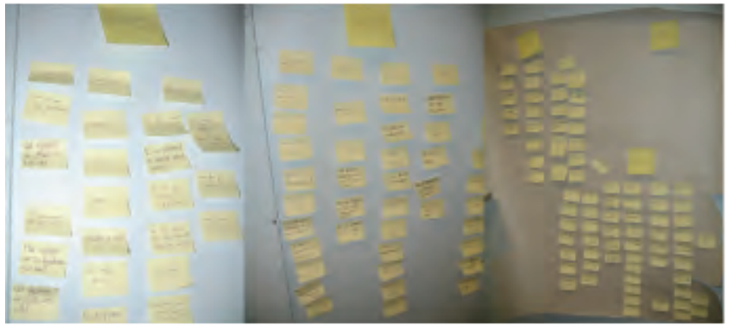
Contextual research is an integral part of the iterative design process, particularly for user centric design. Through observation and analysis a better understanding of the user can be established.

Baking Inquiry

The following research methods were used in a team project to observe the baking process. This presented an opportunity to perform affinity diagrams, contextual inquiries, interpretation modeling, and task flow analyses.

Affinity Diagrams

Affinity diagramming provides an inclusive approach for categorizing ideas. By using post-it notes, all of the details are accounted for first. Different categories begin to emerge on their own as similar trains of thought start to homogenize. This process of starting from the bottom up prevents the exclusion of any ideas. Using this method we were able to create a focus: to find the cultural, personal, and financial influences on the baking process.

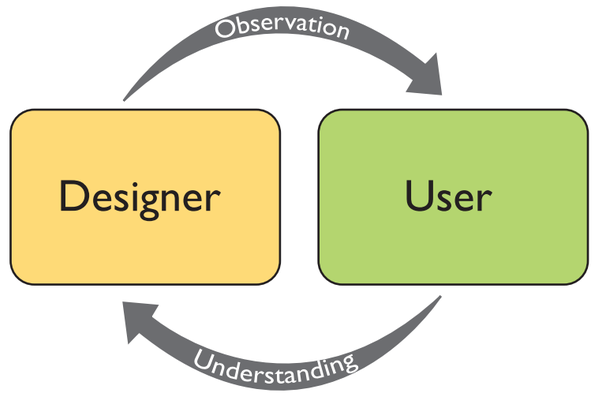


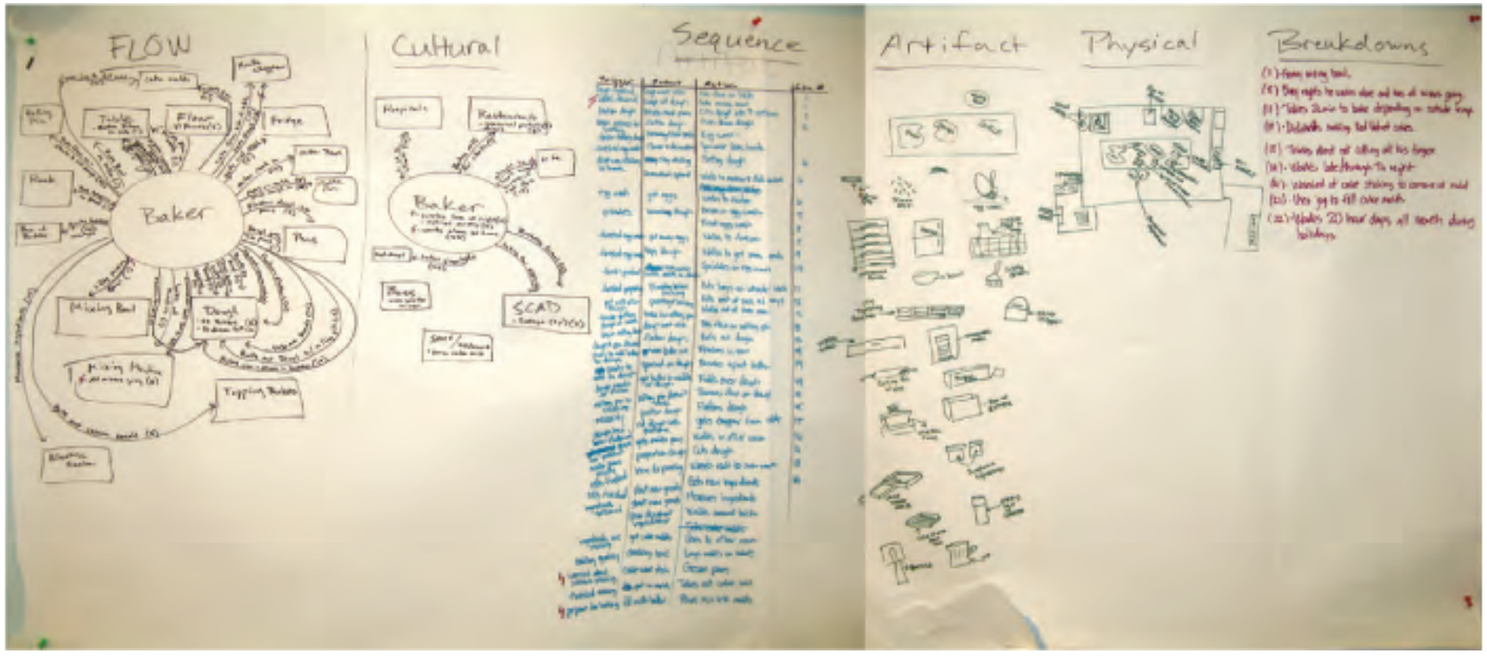
Contextual Inquiry

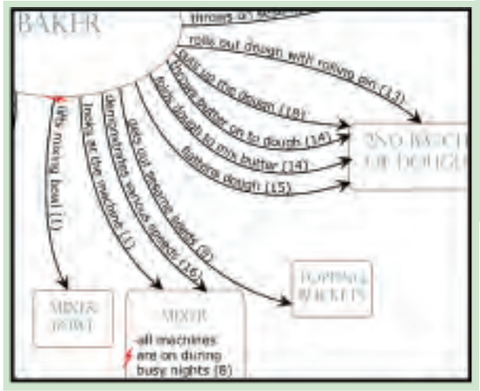
In a contextual inquiry members from the team observe and interview a baker while they are at work. The work environment is a key factor to the data gathered as it provides a first hand experience of the work process.

Interpretation Models

After the inquiry takes place all of the observations are shown in visual form through interpretation modeling. Using flow, cultural, sequence, artifact, and physical models, a list of breakdowns can be documented.

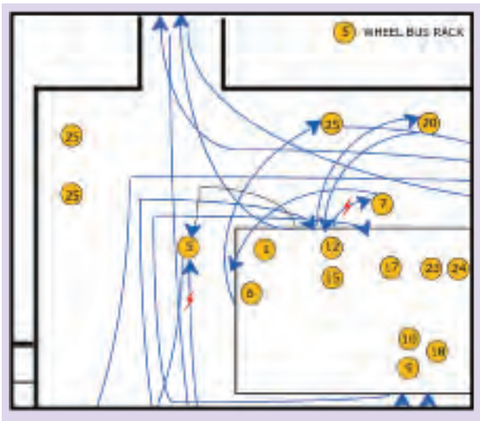






Flow Model

Flow models are used to visual all the actions that were observed during the inquiry. What is unique about this model is that it removes the context of time, providing a "bird's eye view" of the contextual inquiry performed on baking.



Physical Model

Physical models show all of the movements observed in the contextual inquiry. This is shown in the context of the environment as well as the tools. This type of model provides the opportunity to find any physical breakdowns.

Cultural Model

The cultural model is used to visualize all of the influences that take place during the inquiry. This provides a tangible perspective on the effects of all the agents involved in the baking process.

Sequence Model

By analyzing the contextual inquiry in sequential order, the triggers and intentions of actions can be documented. This model helps expose possible breakdowns in the work process.

4. Prepare for cake making.

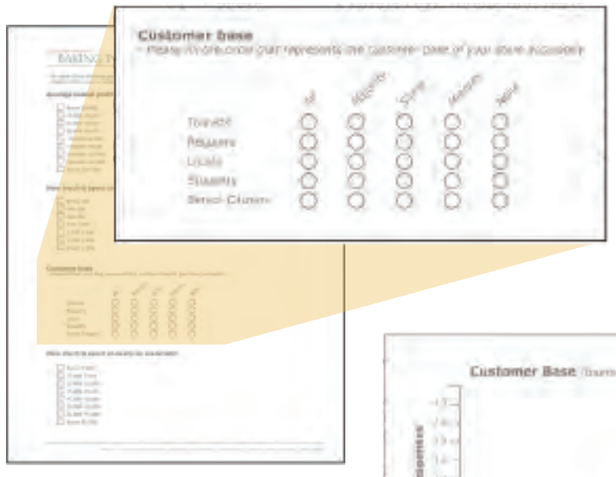
	A	Cognitive	Remembers pans are in the other room.
00:07:18:00	B	Motor	Goes into the other room.
	C	Perceptual	Sees cake molds and pans.
	D	Cognitive	Recognizes cake molds and pans.
00:07:18:30	E	Motor	Grabs cake molds and pans.
00:07:18:35	F	Motor	Brings molds and pans back to the table.
00:07:19:00	G	Motor	Explains how to make sure the pans are flat.
00:07:19:20	H	Motor	Moves pans in front of himself.

Task Flow Analysis

Tasks that were observed during the inquiry are broken down into three different operations: cognitive, perceptual, and motor.
By doing this the group is able to not only observe physical actions but make insights on cognitive and perceptual processes.

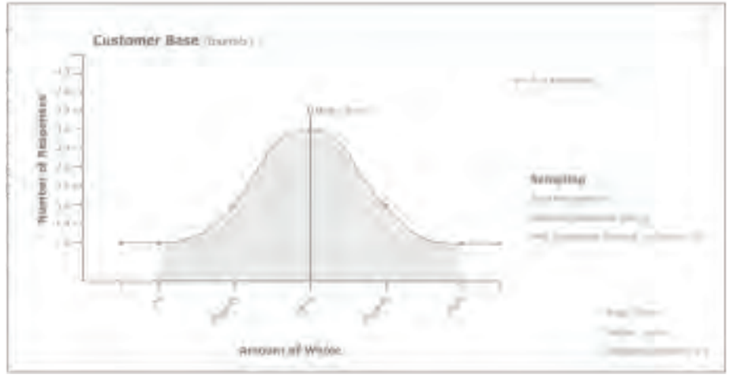
Surveys and Questionnaires

During the research process it is sometimes more beneficial to gather quantitative data rather than qualitative data. Surveys and questionnaires provide the means to collect this statistical information.



Statistical Graphs

Graphs are used to show statistical data in a visual manner.



Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

lüfa Shower Head

This project was used as an introduction to universal design. By focusing on two special needs groups involving hand injuries, an appropriate solution for a product needed to be found.

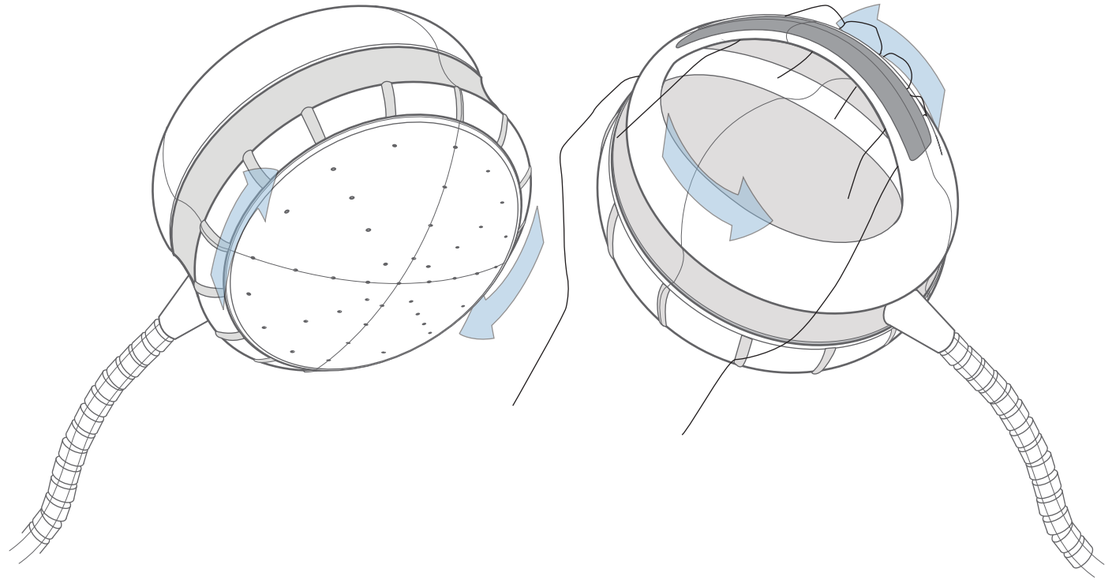
Personas

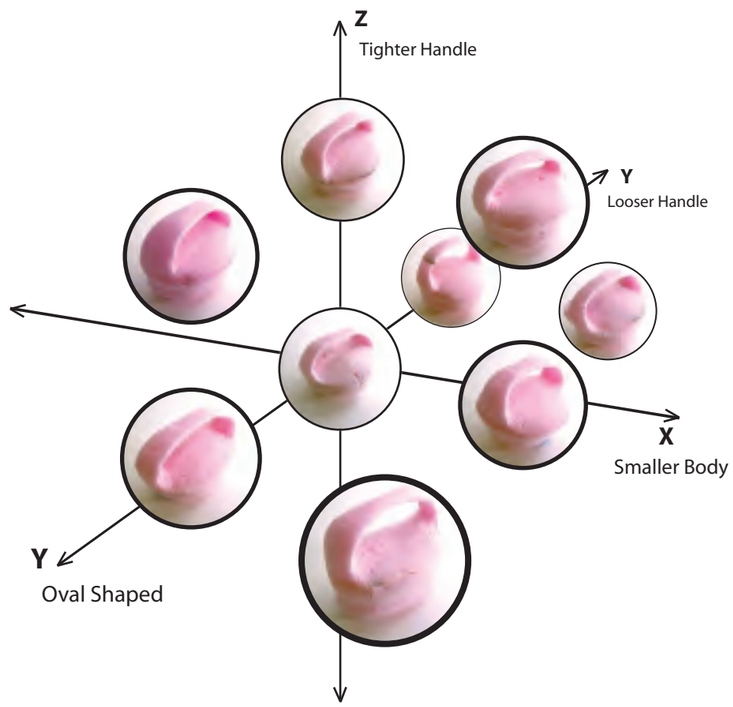
Beth Coperson - Arthritis

Donovan Rites - Carpal Tunnel

Design Solution

The product chosen to redesign for this project was a detachable shower head. Current shower heads use a standard handle attached to the hose. Unfortunately these handles require the ability to make a tight grip. In order to design for Beth and Donovan, the shower head needed a different kind of handle. Since carpal tunnel and arthritis decrease the gripping ability of the hand, a design that was loofah inspired provided a strong concept for the new design. By making the entire head the handle, a narrow grip is no longer necessary. The handle area also spins loosely in order for the hose to reorient itself regardless of how the user is holding it.



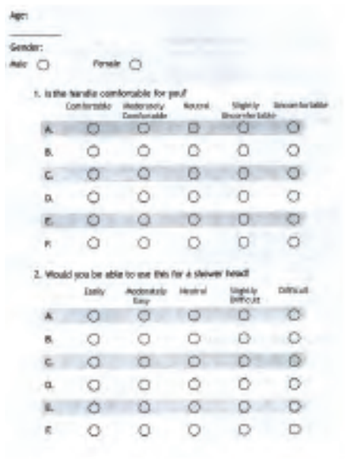


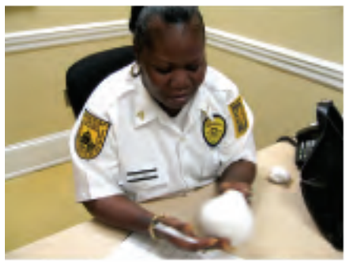
Variation Matrix

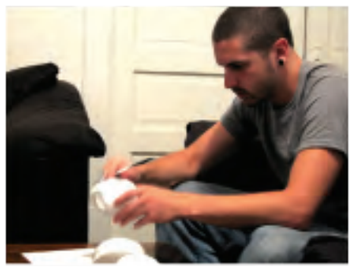
Once the design solution was found, variations of the shower head were made. Using 3D visualization models, the different shower heads accomodated for different characteristics. These can be seen on the matrix arrangement on the left. The nine models were then prepared for user testing.

User Testing

Six of the previous models were used to test with real users. These were spackled and painted to make them more durable during testing. The results of the user testing were recorded using surveys during the tests, This feedback was then used in creating the final model of the shower head.







Final Design

The final design of the lufa shower head included a gap in the handle. This allowed breathing space for those with larger hands. Underneath the handle was a paralleled recession. This allows for finger space when holding the handles and not the head. Since the head is being held this design is an appropriate solution for Beth and Donovan's special needs.

Alex Kim
www.alexkimdesign.com

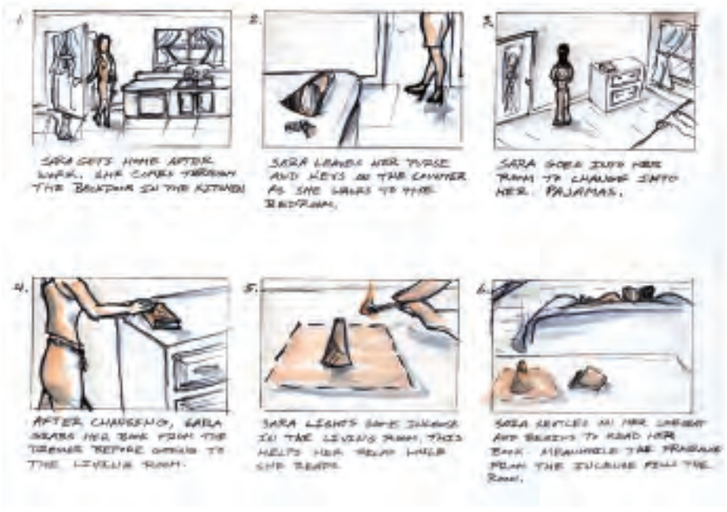
912.695.0592
alexkim804@gmail.com

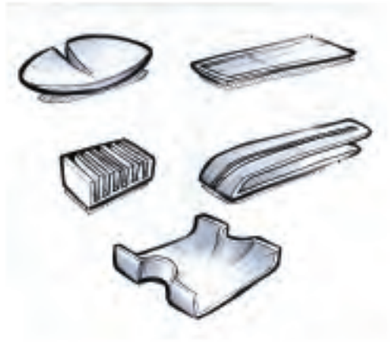
Cone Incense Burner.

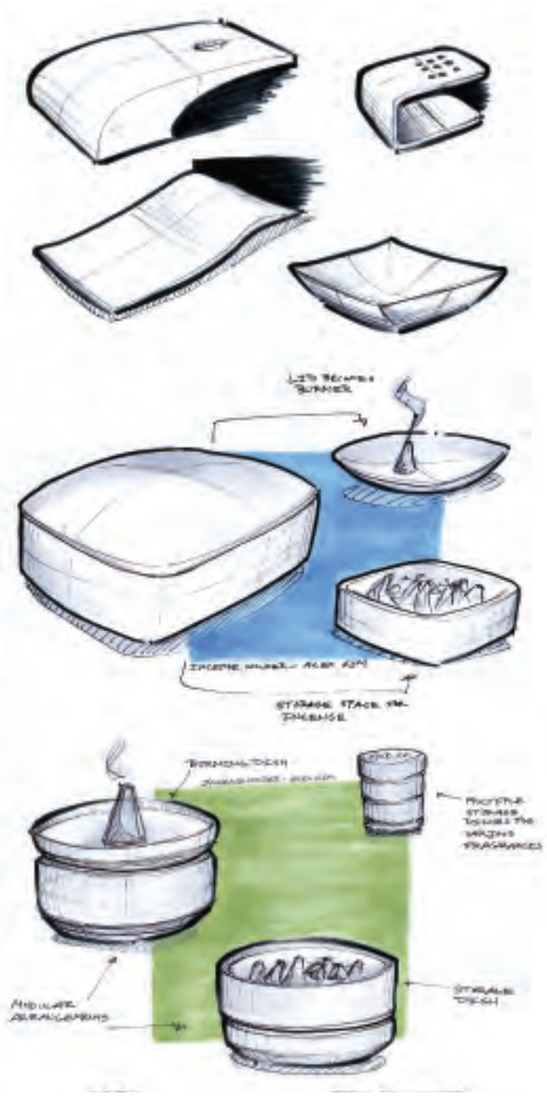
For this project an emphasis was placed on the ritualistic manner of burning incense. Through visual research it became a bit clearer as to what people do in these private moments.

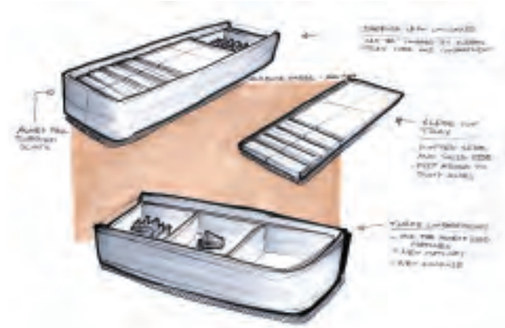


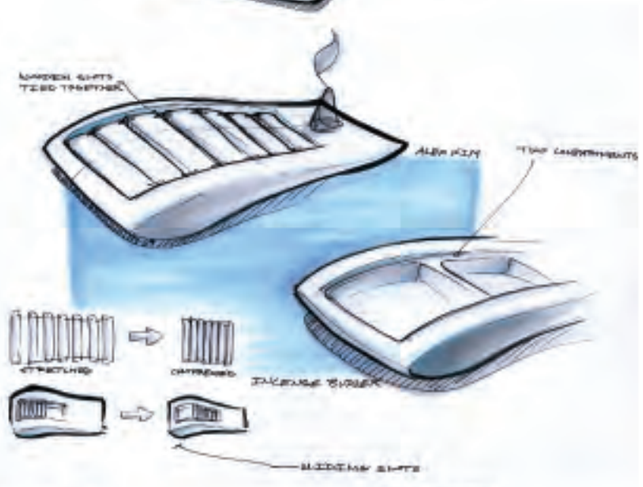
The persona for this project was Sara Tristman. Sara lights incense when she reads which is usually after a long day at work. Sara is a 29 year old dessert chef who lives in Georgetown, Washington D.C. She was an english major in college and always loved reading. For her, the ritual is about her and her book, the incense is just to help her relax and pull her away.

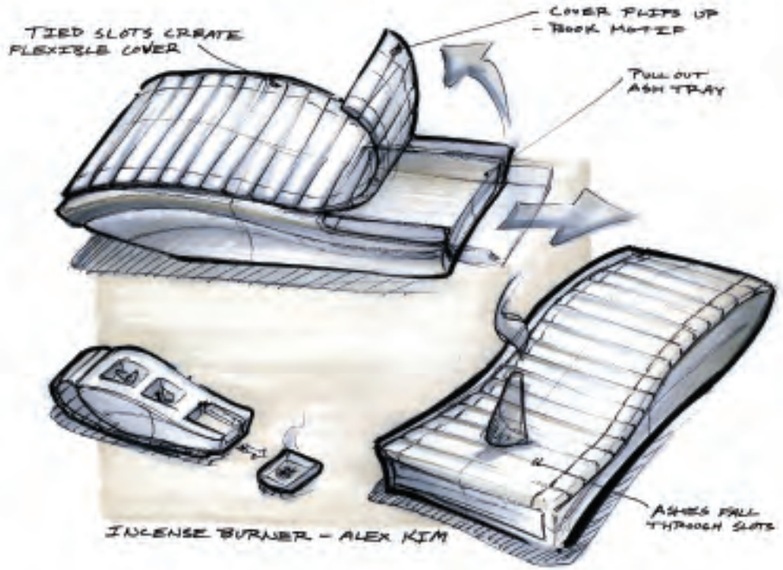




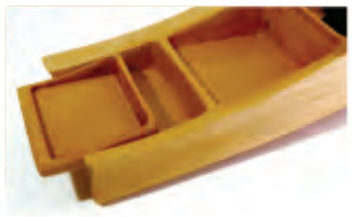








The front compartment catches the ashes that fall through the slots. This tray slides out for easy clean up



Middle compartment can be used to store matches.

All compartments have an incline so objects are secure.

Third storage comportment can hold multiple cone incense for later use.

Top cover folds under following a book motif.

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

microwave interface

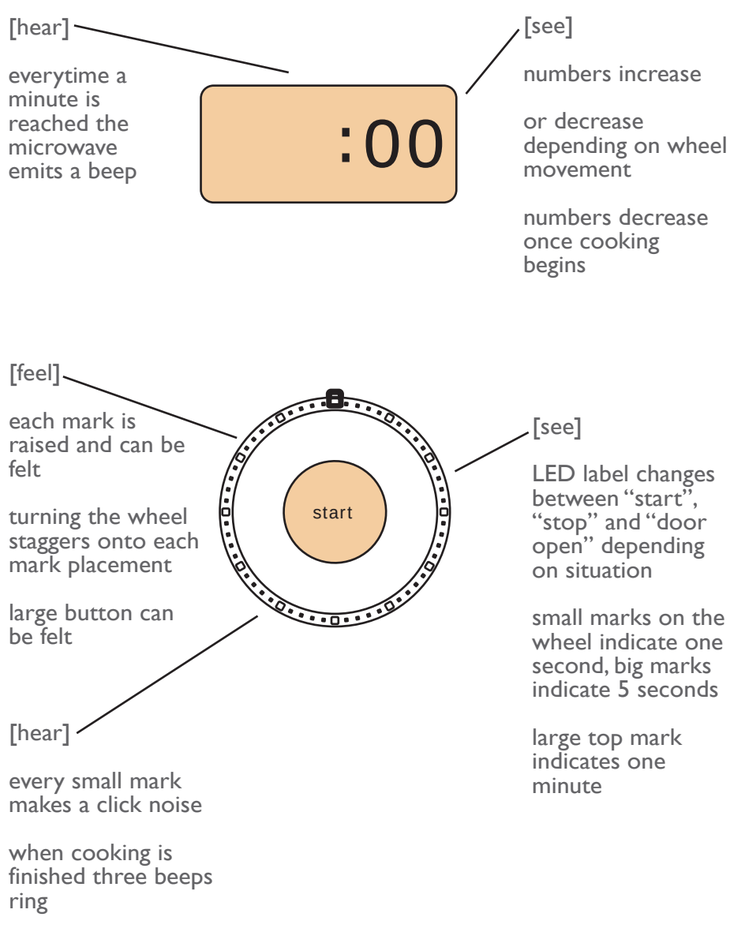
design solution

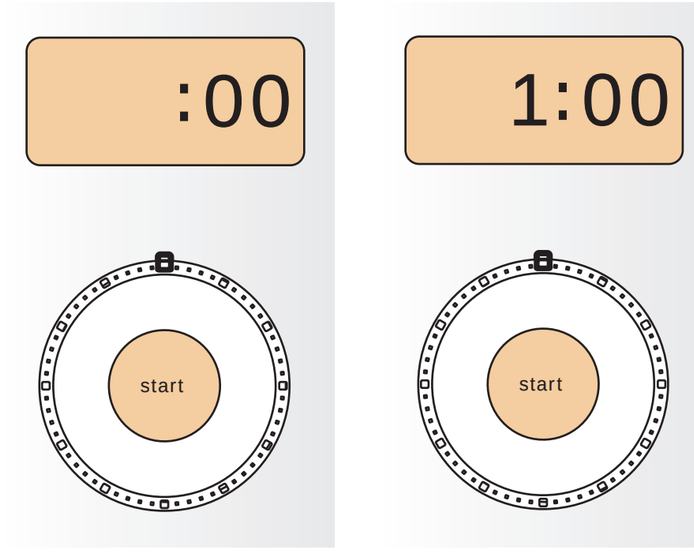
For this project we were given more freedom as far as technology was concerned. However, I realized with this freedom comes a greater design responsibility. I began to question the unecessary use of technology in common products and noticed that such practices create exclusive experiences which people who are visually, or audibly impaired can't achieve. So I took this problem and created a solution which was the Multi-Sense Microwave.

Project Description

The problem for this project was to design, test, and build a working interface for a microwave oven. Design solutions are modeled to accurately fit the needs of created personas. This involves creating prototypes for user testing, and eventually a fully working prototype which is also tested. Finally the design process is complicated with the lack of design constraints.

[see]	visual feedback
[hear]	aural feedback
[feel]	tactile feedback



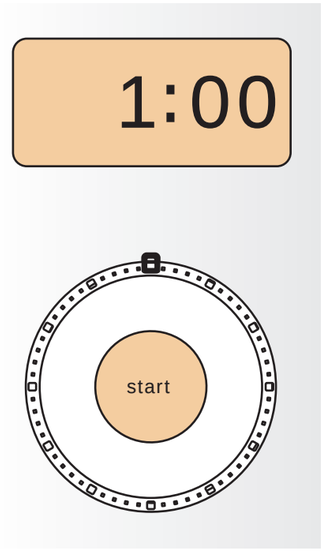


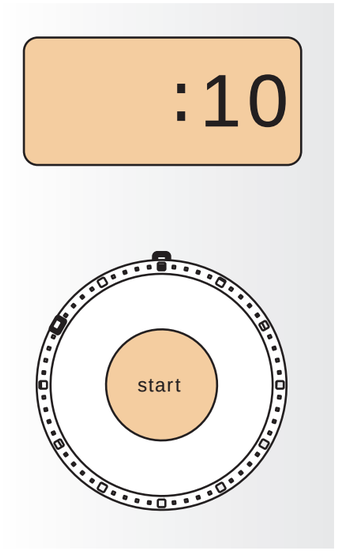
Setting the Cook Time

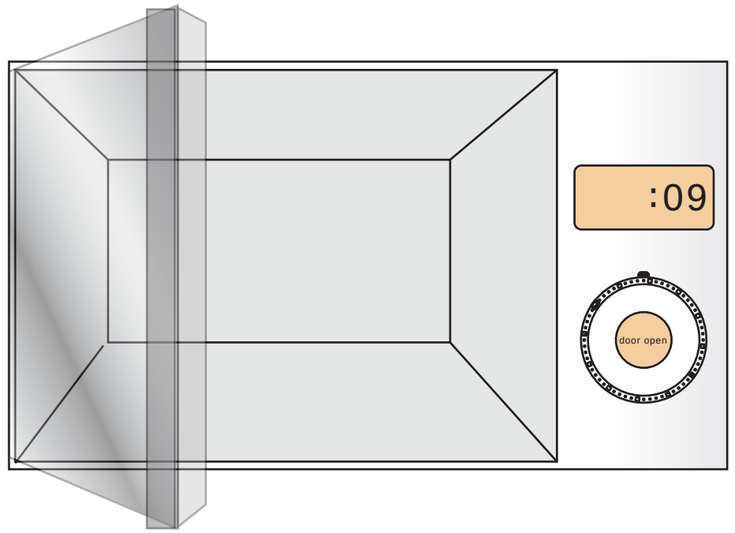
Turning the knob counterclockwise increases the Cook time, while turning it clockwise decreases.

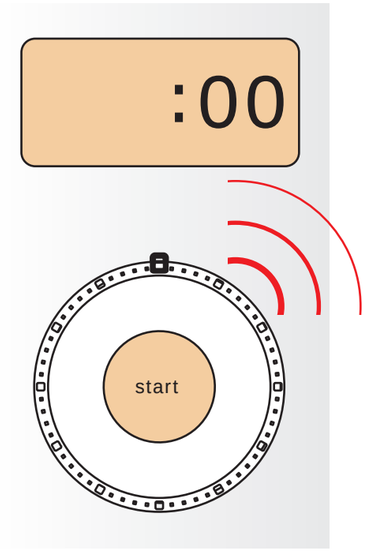
Multi-Sense Interface

For this project I wanted to create a multisensory interface in order to create a non-exclusive product experience. By using visual, audible and tactile feedback, any user whether visually impaired, audibly impaired or physically handicapped can effectively use this interface.







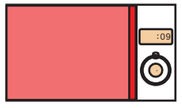


Cooking

Pressing the start button initiates the cooking. This changes the button's function to "stop" while the timer counts down and the knob rotates.

Opening the Door

Opening the door while cooking, stops the cooking and the countdown. "Door open" then appears on the button.



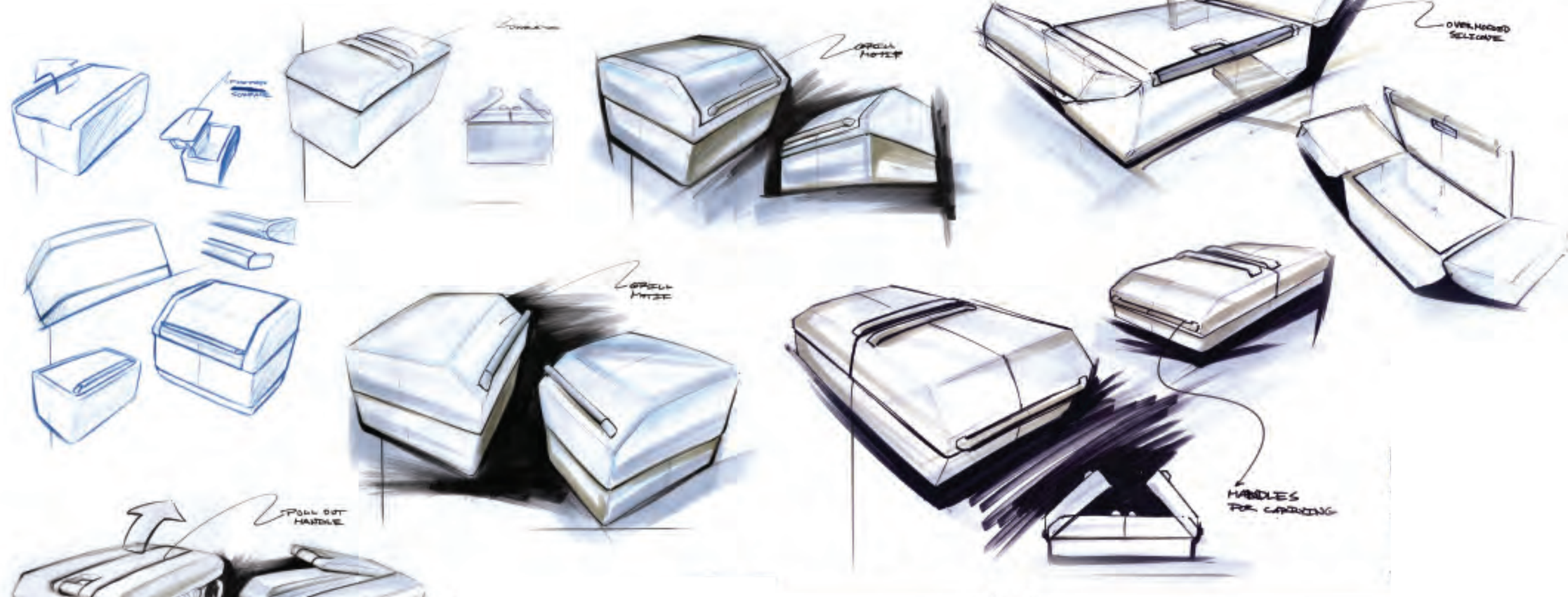
Finishing

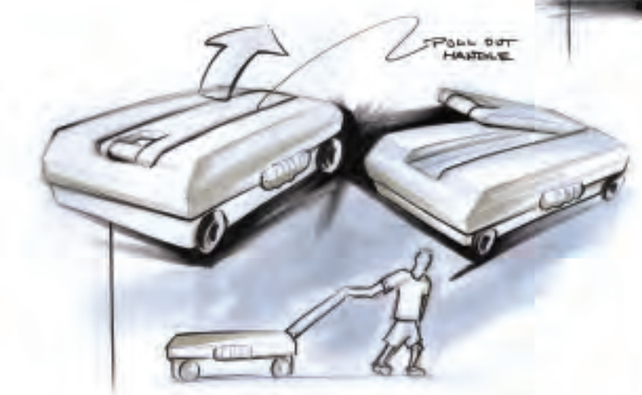
When the cooking finishes 3 beeps will ring, and the button will show "start" once again.

Alex Kim
www.alexkimdesign.com

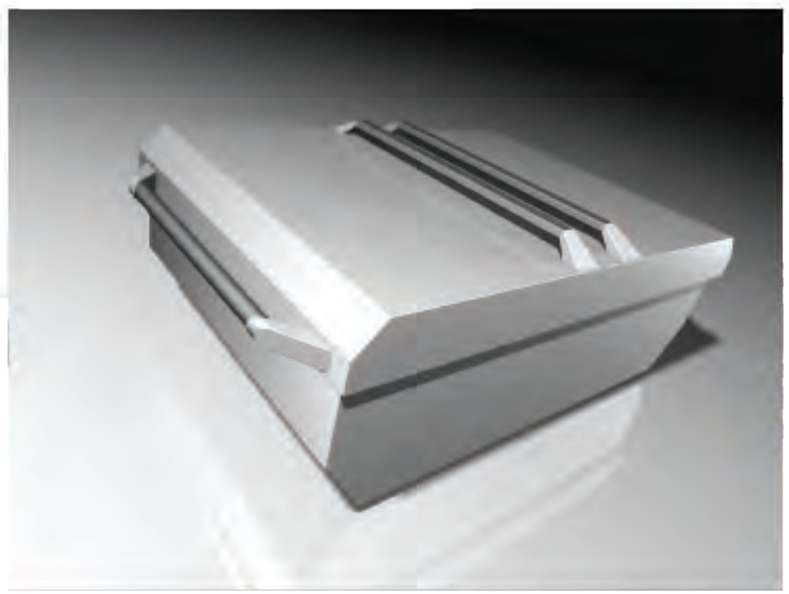
912.695.0592
alexkim804@gmail.com

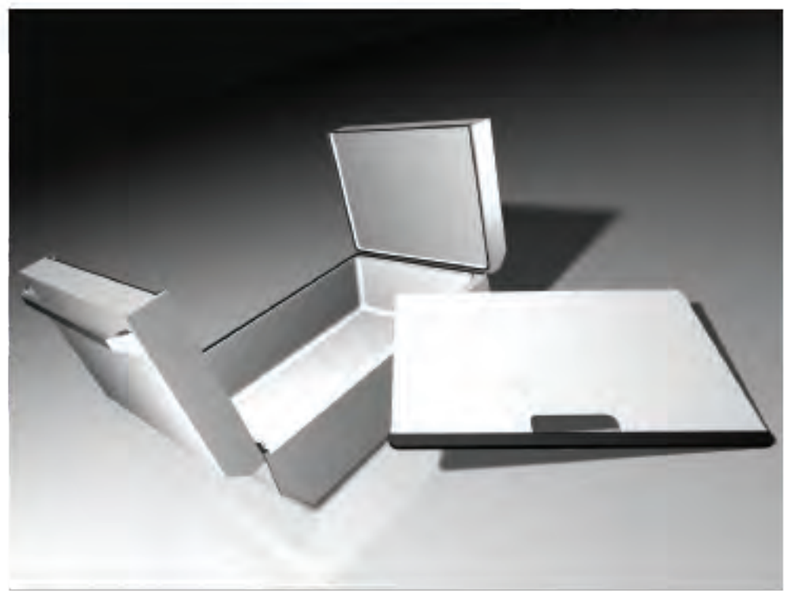
CRISP. Catering Cooler





The Crisp Catering Cooler was designed through inspiration of the material. Stainless steel is often used in the high-end culinary market which is an untapped domain within the cooler industry. The catering business seemed to be the ideal fit between these two specifications, which lead to the inspiration of CRISP. Currently, caterers often use styrofoam to transport food, however the use of CRISP would reduce waste as well as providing superior performance in keeping the food either warm or cold.





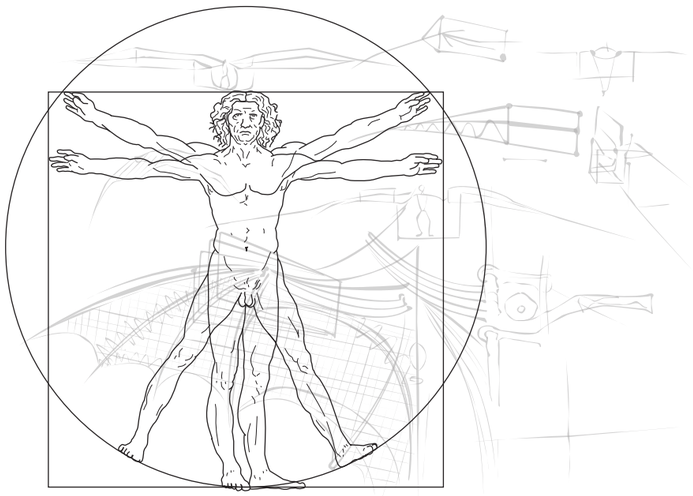
alexkim DESIGNER

CHI 2008
art.science.balance.

SIGCHI

The following visual elements and print deliverables were designed for the CHI 2008 conference in Florence, Italy.

Vitruvian Man and Leonardo Vector Art



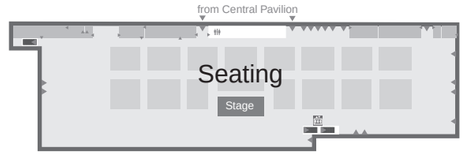
Conference SWAG: Magnet

Official poster & Print Ad

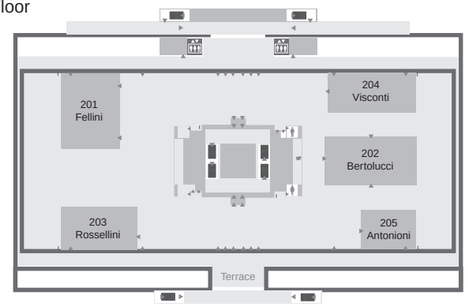
Conference SWAG: Shirts and Balls

Conference Center Floor Maps

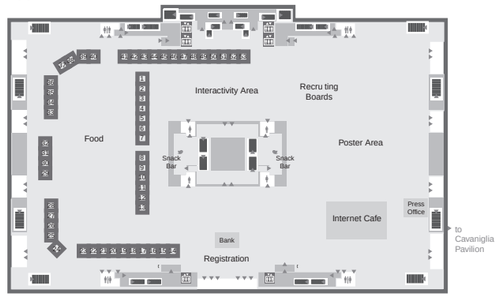
Cavaniglia Pavilion



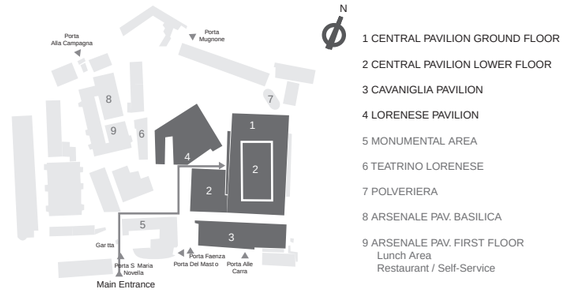
Central Pavilion
First Floor



Central Pavilion
Ground Floor



General Map



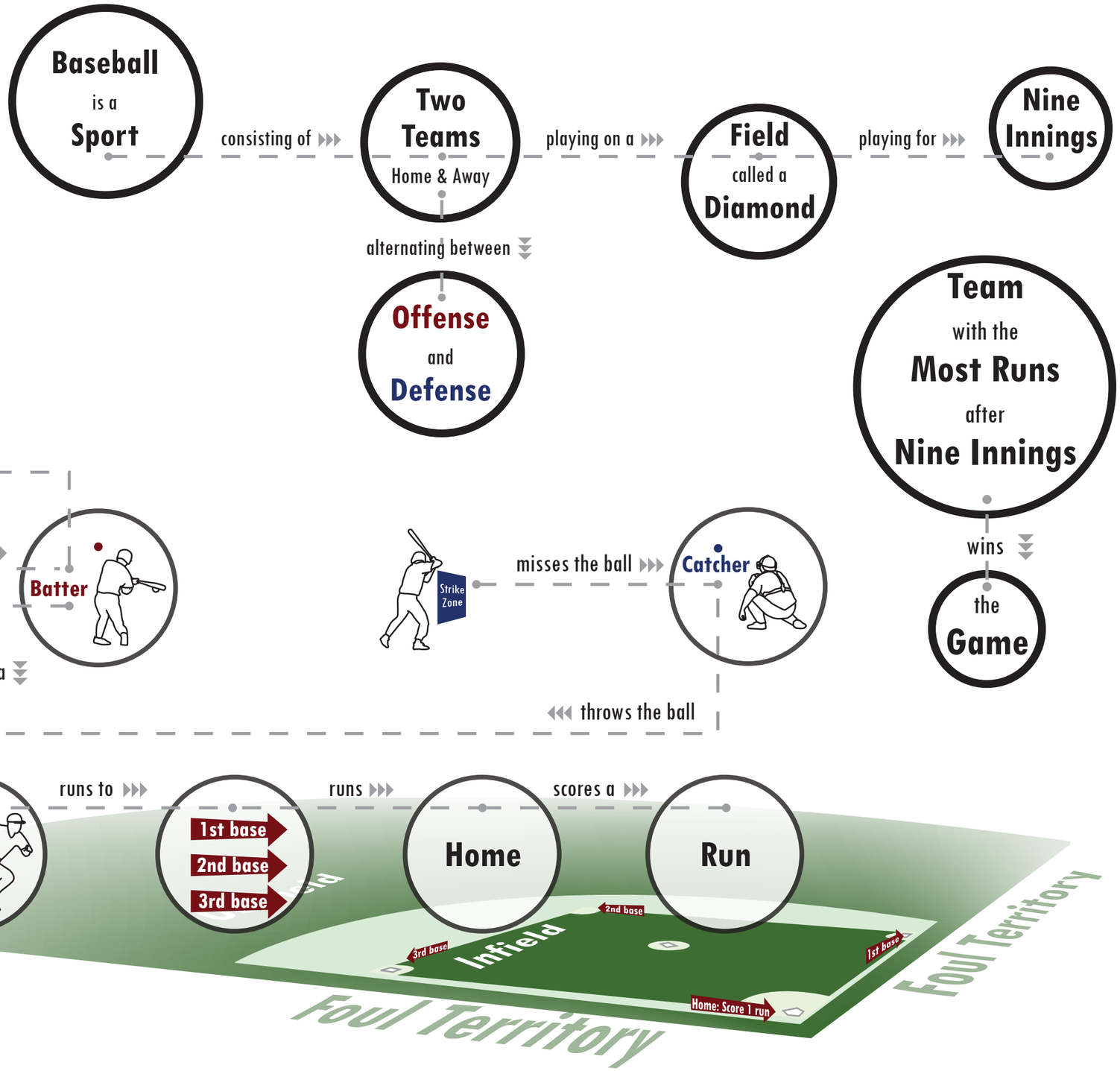
XK DESIGN

Alex Kim
www.alexkimdesign.com

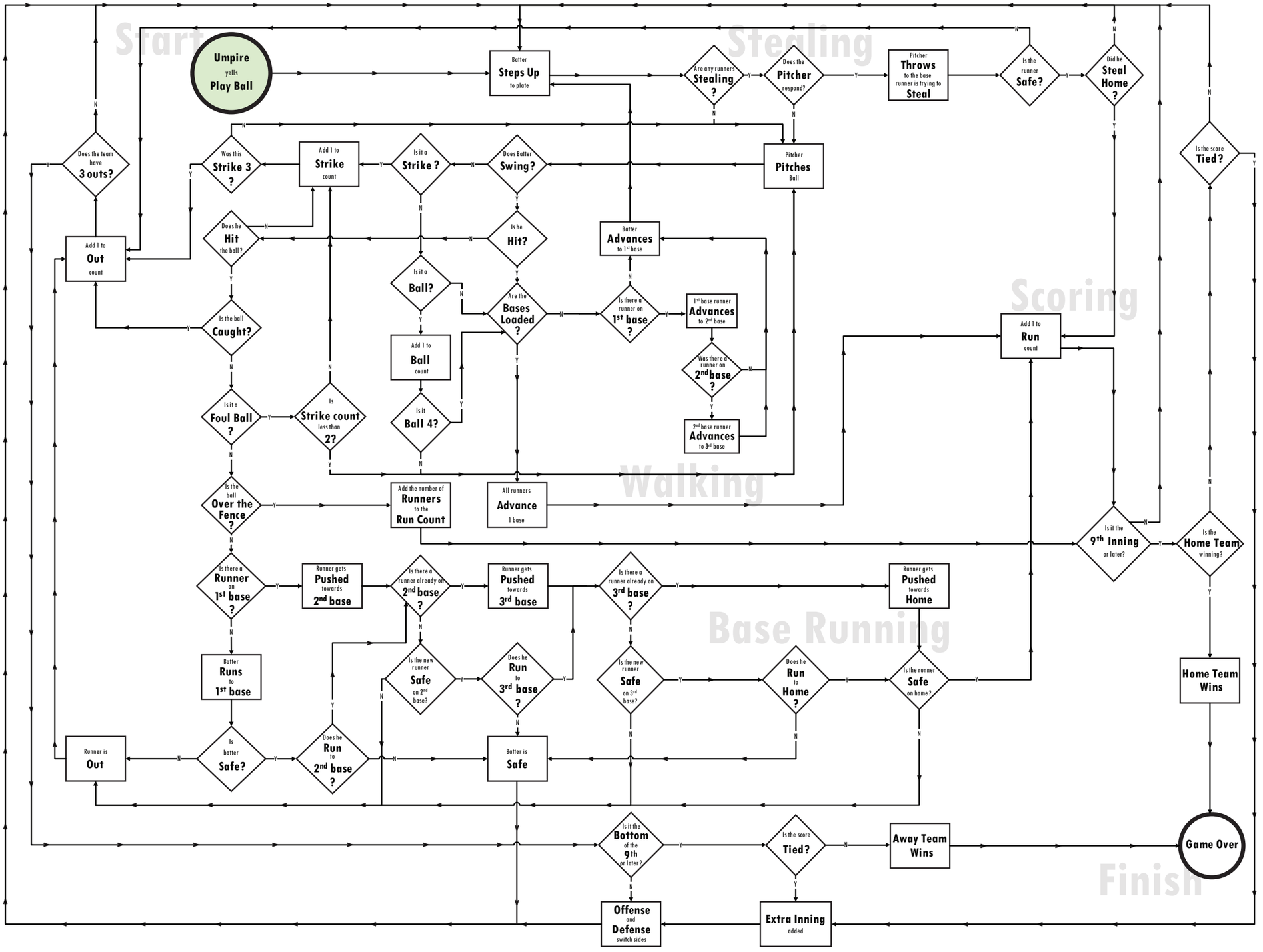
912.695.0592
alexkim804@gmail.com

BASEBALL DECONSTRUCTED

The purpose of the baseball deconstructed project was to use information architecture to explain the game of baseball. Because of the structured rules in baseball, as well as its strong cultural influences, it provides an appropriate opportunity in explaining the sport. By portraying a complex system using different methods of visual communication, someone who doesn't know the game, should be able to understand it. The methods used were concept maps, process flow diagrams, and narrative essays. Each of these has a unique function and process in explaining the entire game of baseball. The first step to utilizing these methods was to collect and analyze the raw information through research.



Process flow diagrams are used to portray the rules and sequences within a system. This is done in order to visualize and analyze the conditions involved in the actions that take place. In these diagrams, decision points are signified with a diamond, resulting in a yes or no path. Boxes are used to denote a state while circles are beginning and ending points. In this process flow, the game of baseball was used as the subject.



Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

DELL REGENERATION | DELL RENEW

The idea behind *Dell Renew* was to utilize a “full circle” approach in which entire product ecologies could be taken into consideration. This was done by addressing the areas of energy consumption and consumer waste. By taking advantage of these design opportunities, a new product brand and recycling service were created in order to establish sustainable product life cycles for Dell.

ENERGY CONSUMPTION

Switching to alternative energy sources has been a long desired environmental goal. Many automobile and electronics companies are in development of fuel cells to power their products. With these new emerging markets, there seems to be a future opportunity for Dell to provide products which power and utilize these new energy sources. This inspired the creation of *MeOH*, a product sub-brand for supplying Methanol fuel for fuel cell technology.

RECYCLED COMPUTING

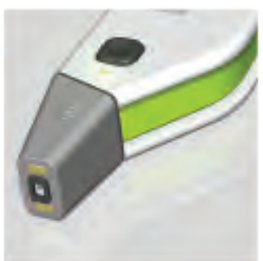
Recycling services for computers and other electronics have been available for quite some time, however their adoption is miniscule compared to other recyclable products. The reason behind this is the inconvenience involved with recycling old devices, since they can't be left in the standard curbside recycling bin. In order to compensate for the inconvenience, incentives and rewards can be given to the consumer in order to promote this practice.

MeOH

The MeOH brand would provide methanol solutions for fuel cell energy in electronic devices. Part of this effort would also be to pursue fuel cell technology for new devices made by Dell. Utilizing an alternative energy source can create conscious awareness of energy consumption on the consumer side.

Power on the laptop is getting low, requiring a fill up of MeOH.

The user plugs in a MeOH cartridge and sees the light come on. The button is then pressed to inject the methanol.



Metal contacts on the cartridge allow for the charge necessary to load the methanol. This powers the charge needed for the flap or e-ink display. The fuel would be released in a single shot after the button press loading the fuel cell with methanol.

After use, a drop down flap or e-ink display would reveal a return address and pre-paid postage mark.

The back portion of the methanol cartridge would either have a release flap or e-ink display. After use this would reveal the address and pre-paid postage for return. The cartridge would then be disassembled and recycled.

The cartridge could then be dropped in a box to be sent back for recycling.

Transferred

The Dell Recycle & Reward program would be used to incite users to recycle old products and devices. By providing rebates, new products, and prizes Dell would be able to give proper incentive to the user. This service would be web based where consumers could enter information about the devices they're sending, and receive the appropriate postage paid packaging from Dell. Once Dell receive the products, points would be given to the user.

XK DESIGN

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

alexkim DESIGNER

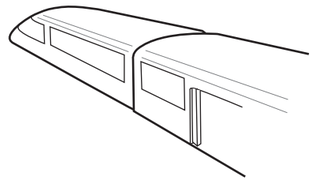
Connect

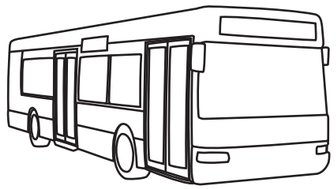
community . culture . experience .

Connect is a Java application that runs on Bluetooth enabled cellular phones and PDA's. The entire system consists of the software as well as a network of servers and bluetooth enabled transit modules. This enables users to connect to their destinations, other users, and to an experience of community through public transportation.

Scope

In today's metropolitan areas, under utilized public transportation often wastes an extraordinary amount of the city's funding. Although traveling by car is still done by the majority, increases in gas prices and environmental problems have created a more urgent need to use public transit. For this competition students were presented with the task of promoting the use of public transportation. Within this design problem, a user centered solution must be created through an intense process of ethnographic research, prototyping, and user testing.





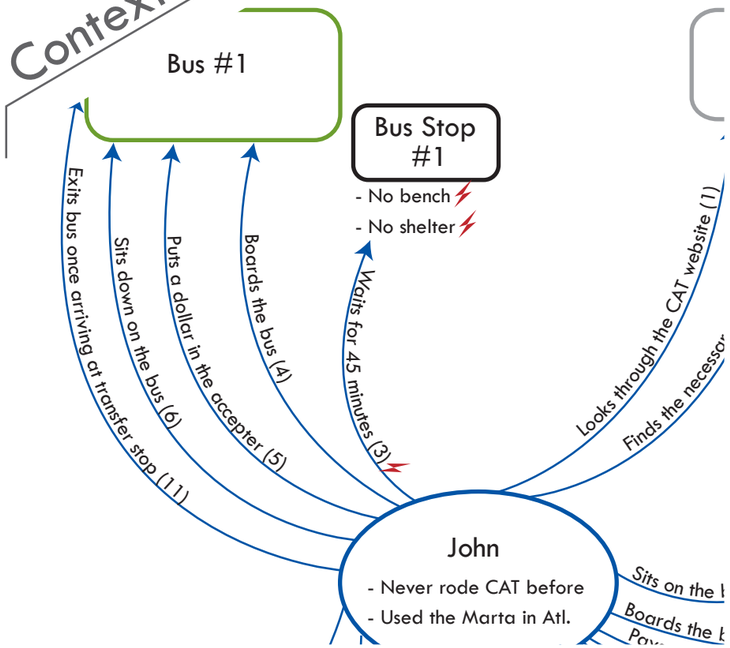
Personas

Olivia Scott
- 26 years old
- Graduate student
- Pays for school
- Marathon runner
- Rents a studio apartment
- Drives a vespa scooter

Patrick Gills
- 18 years old
- Drives a 1987 volvo
- In an electro-clash band
- Plays videogames
- Spends hours a day online
- Myspace & Facebook

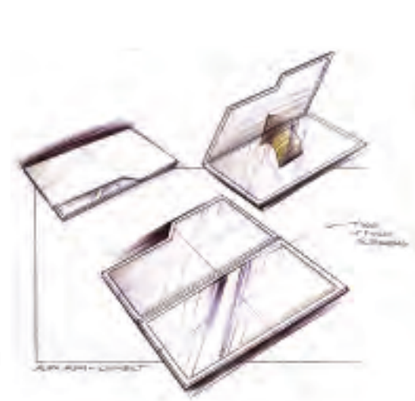
James Chapson
- 33 years old
- Assistant D.A.
- Lives downtown
- Blackberry user
- Plays racquetball

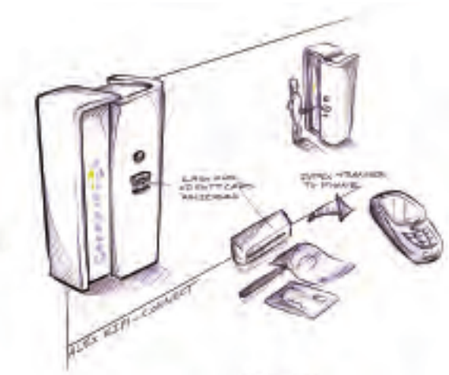
Contextual Research

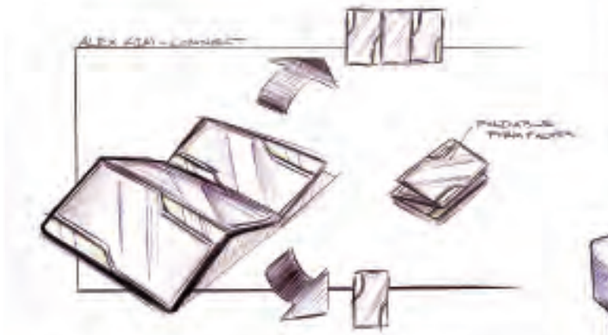


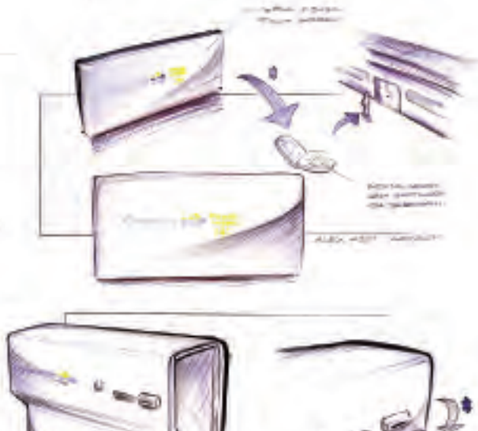
Ideation

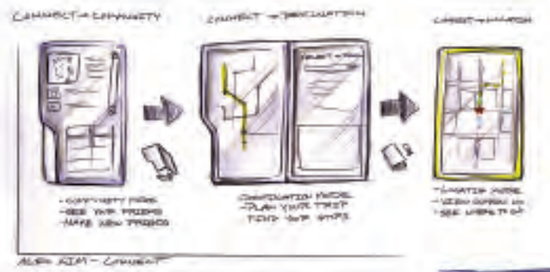
Ideation for connect began with the concept of a dedicated handheld device, but because of the high cost of such a product other solutions were pursued. The next iteration was a combination of cell phone software and download / payment stations. Again the cost benefits of having the solution utilize the least hardware possible created the solution for Connect which is a cell phone java application that can be downloaded from the user's WAP service.

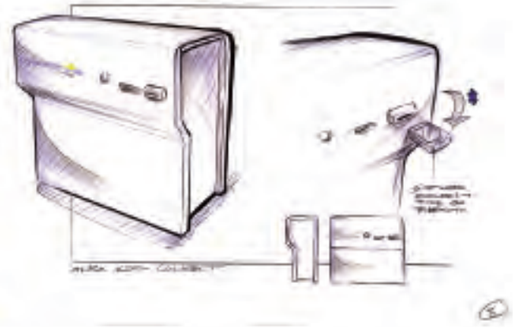










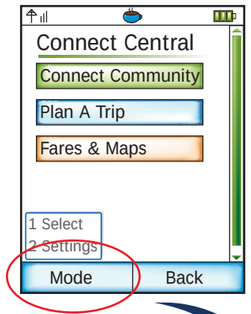


User Testing

User testing for the Connect interface was done through the Think Aloud Protocol. This enabled the team to know exactly what the users were doing and perceiving as they used the prototype. From these tests it became clear that the software would work well with the personas the team created. A heuristic evaluation was also done in order to analyze the software with a discerning eye. This process found many errors which were recognized and addressed.

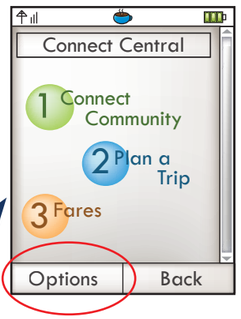
Heuristics

- Visibility of system status
- Match between system and the real world
- User control and freedom
- Consistency and standards
- Error prevention
- Recognition rather than recall
- Flexibility and efficiency of use
- Aesthetic and minimalist design
- Help users recognize, diagnose, and recover from errors
- Help and documentation



"I want to go back and look at the options again. I didn't find what I thought I was going to."

-Lisa



"I don't understand. I thought I had already selected that option on the last screen."

-Joyce

Final Solution

Inspiring Community

Riding public transportation is often an antisocial experience where people keep to themselves. The disheartening irony is the enormous potential public transit has for providing social value. The act of transporting multitudes of people from the same location to the same destination should provide a sense of community, and with Connect it does. By allowing users to initiate contact in an informal manner, conversations can be sparked and the solitary aura of public transit is replaced with one of enjoyment.

Providing Information

The amount a ride costs is not always clear when riding public transit. This leads to ill prepared passengers who can slow down the system when trying to pay. Connect helps consolidate this by providing appropriate fare information specific to the user. By inputting the serial number on a transit pass, users can have their personal fare information.

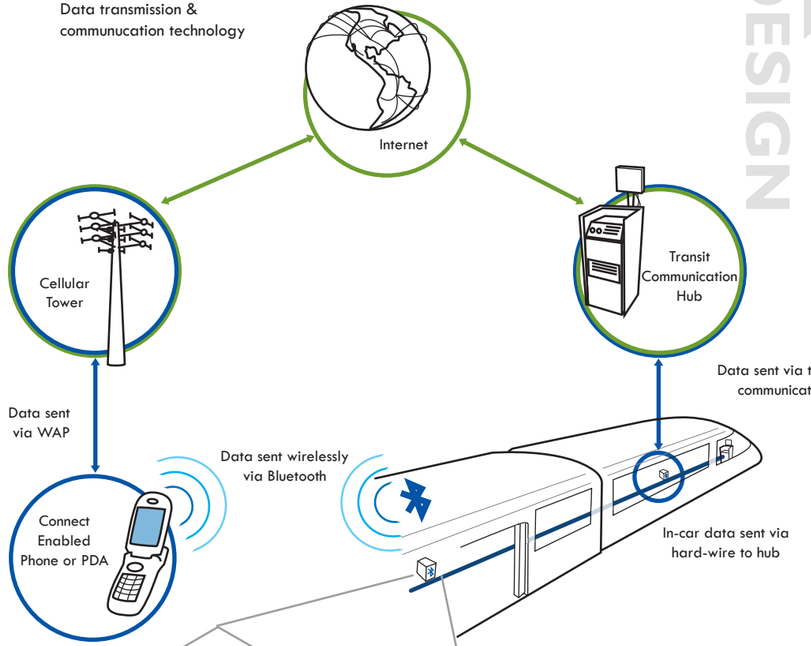
Enabling Usability

Knowing how to get from point A to point B is often an initial hurdle in using public transit. With Connect, users simply type in the starting address and the ending address to find the most efficient route for them.

Connect

Technology Model

Data transmission & communucation technology

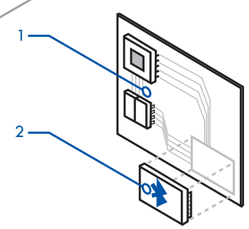


Connect

Cost Analysis

Estimate for implementation

Components



1 - Main Board with Integrated MPU & Flash Memory..... $9

2 - Bluetooth Transceiver..... $10

Total Cost... $19

New York City

NYC Population..... 8.2 Million
MTA 2006 Budget... $9.09 Billion

Number of Transit Cars..... 8,590
x $19

City Cost... $163,210

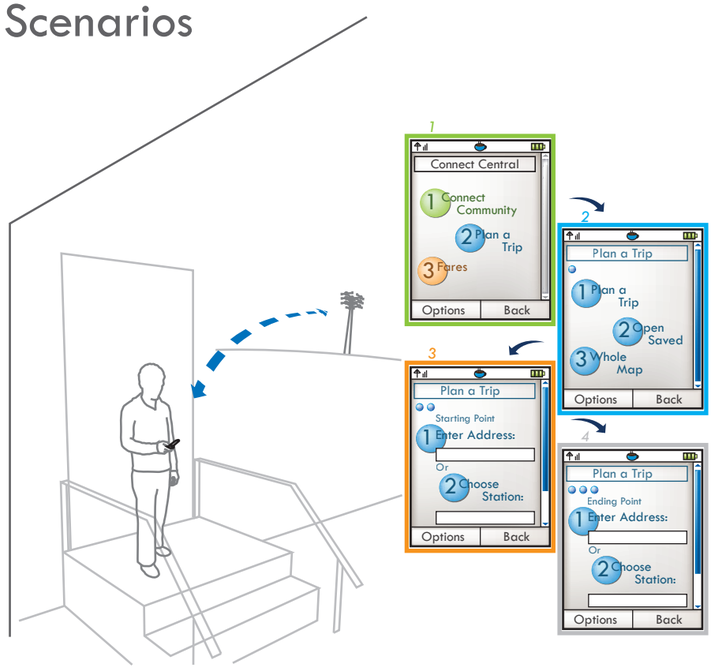
Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

Connect

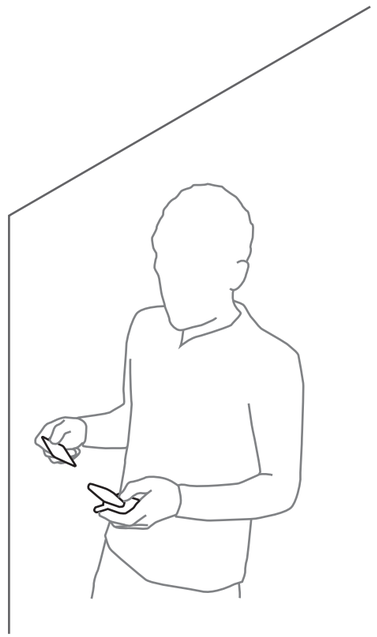
community . culture . experience .

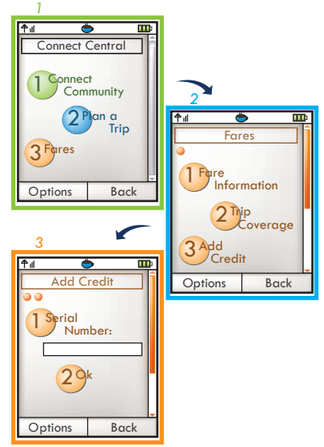
Scenarios



Planning a Trip

James starts Connect on his cell phone and is greeted with the *Connect Central*[1] screen. From here James presses the 2 button on his phone's keypad to start planning a trip. In the *Plan a Trip*[2] screen he can press 1 to route a new destination. To plan his trip James enters the address of his *starting point*[3] and his *ending point*[4] to find the best transit route. This information is sent via WAP to be calculated into his directions.



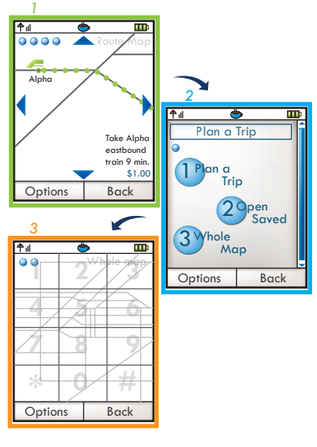


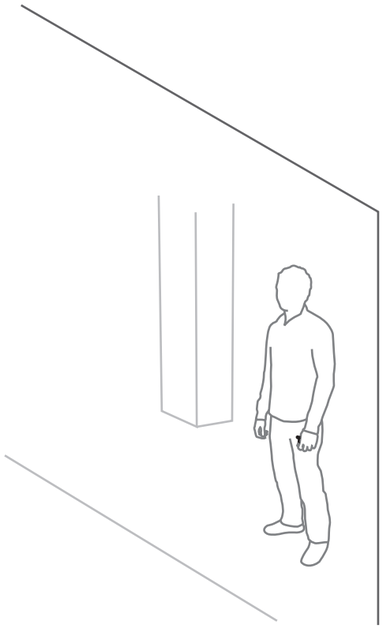
Tracking Fares

James buys a new pass for riding the bus and wants Connect to display the transit costs that apply to him. From *Connect Central*[1] he enters the *Fares*[2] section of the software and chooses *Add Credit*[3]. From here James is able to enter in the serial number from his bus pass which Connect uses to update the fare information. If credit is ever added to the same card Connect automatically updates the fares.

Viewing the Maps

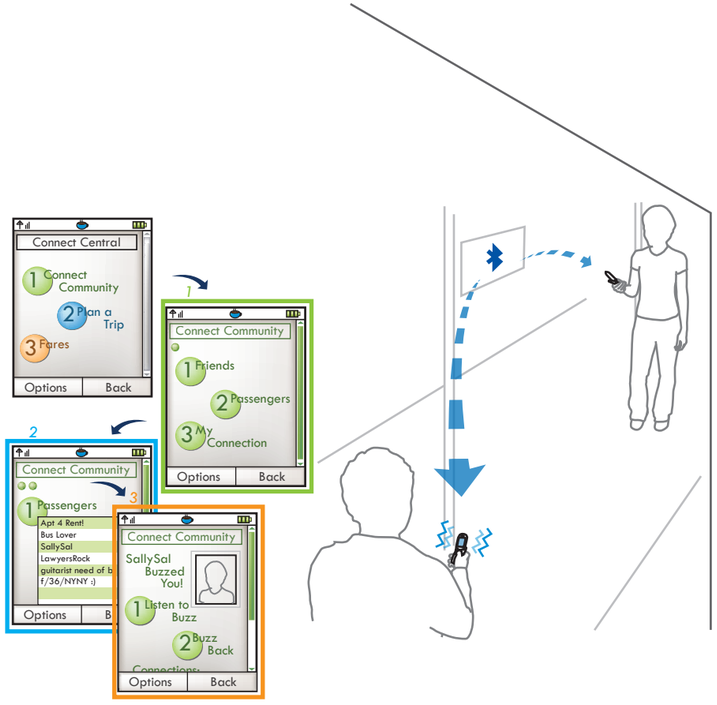
Once the trip is planned, James is able to see his best route on a *map*[1] showing which methods of transit will be used, their location, travel time and cost. Using the directional buttons on his phone's keypad James can progress through the directions. If he wants to view the whole map James can do so from the *Plan a Trip*[2] screen. Once the *whole map*[3] is displayed James can pick an area to zoom into using his number buttons.





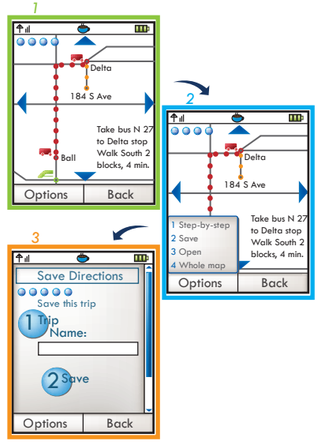
What's the Buzz?

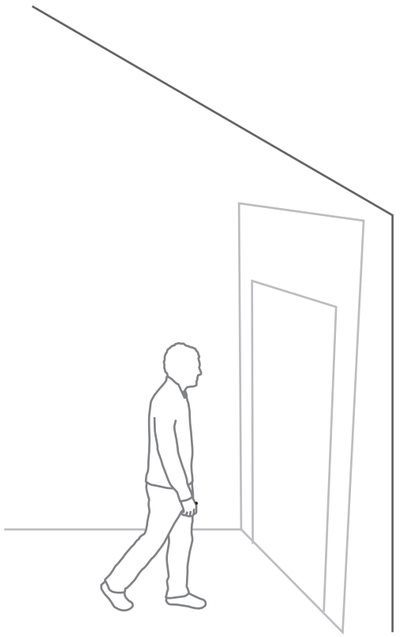
James begins looking around at his *fellow passengers*[2], on *Connect Community*[1] through bluetooth and in real life. All of a sudden James' phone begins to vibrate and on the screen he sees that SallySal has *buzzed*[3] him. He decides to listen to her Buzz, which is a pre-recorded message SallySal made when making her Connect profile. From this screen James is also able to view the rest of her profile or Buzz her back with his Buzz message.

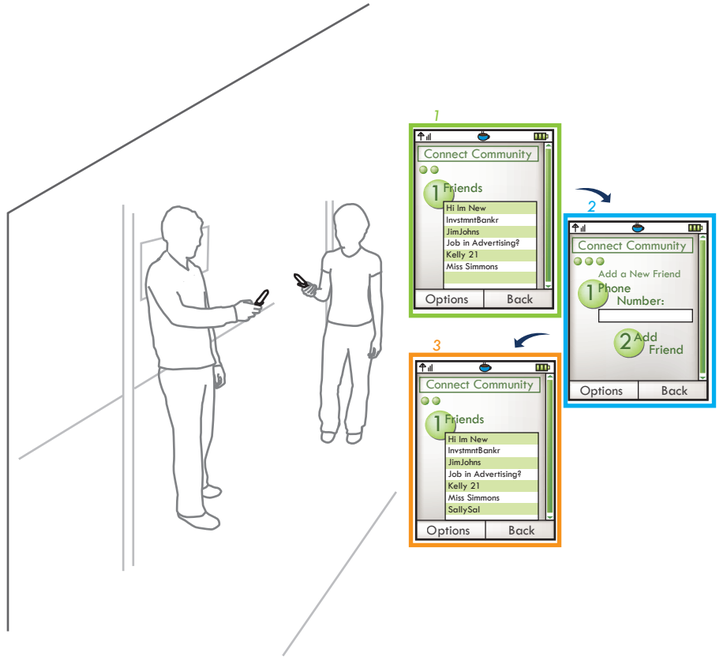


Saving a Trip

James gets to his last stop and sees he has to walk one block south. The *Connect map*[1] color codes the dots depending on the travel method; green for subway, blue for bus, red for rail, and orange for footpaths. Once James gets to his destination he decides to save this trip to user again. To do this he clicks the left soft key on his phone for *Options*[2] There he can choose *Save*[3] and name the trip for later.







Connect Community

James wants to talk to SallySal so he looks around and finds her based on her picture. They start talking and have a nice conversation. Before parting ways they decide to add each other to their *Friends list*[1] in Connect by exchanging *phone numbers*[2]. The *Friends list*[3] lets users know when their friends are travelling on the transit system. This information can be made private if the user desires not to be viewable.

Through the use of a user centered design process, the Connect team has created a solution to increase riders for public transportation. By providing both human value and social value, Connect allows users to travel easily and meet new people. This system facilitates a unique and enjoyable experience which in turn encourages more people to use public transportation. Pulling inspiration from online social networking and user created content, Connect provides a new opportunity for both the transit system as well as the community that uses it.

Sources:
http://www.am.necel.com
http://www.intercai.co.uk
http://www.mta.nyc.us

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

alexkim DESIGNER

Let's Play

Play = Communication

Let's Play facilitates unique combinations of play and communication between parents and their children. This is done through the Let's Play service which provides activities for the family via interactive adventure packages.

Observing Play

Research for Let's Play revolved around the observation of the way kids play. This was done by utilizing the following tools.

Legos

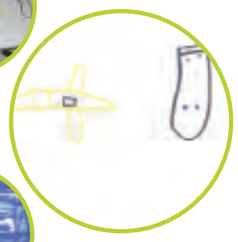
Legos were supplied to observe the planning and building process used by children during play.

Markers and Paper

Markers and paper were used to observe the communication of ideas through drawing.

Disposable Camera

Photographs of family and children's play areas were taken, as well as photos of favorite toys.



"I like drawing because it makes me a better artist."

"There should be only one ski cause that one won't stay."

Spencer used his Lego creation to interact with a drawing of his. Although he had initial doubts about his ability to make something meaningful out of the Legos, he was able to create an interactive story between the 2D and 3D models.

Spencer created these drawings when asked to draw the airplane and the car that he created using Legos. Afterwards he built a boat and drew an underwater scene with a shark to interact with.

"I'm not really sure, I'm just making it."

"He's a SCUBA diver."

Jason immediately began to build a car and explained that he didn't know what kind of car it was but that he was just making it. Once an artifact was built, Jason began to elaborate a story which went from SCUBA diving to race car driving to spying on Santa Claus.

"I don't like playing with boy's toys."

"I'll just name it Brownie."

Jenna starts out explaining that she doesn't like playing with boy's toys so she doesn't like Legos. She decides to draw some flowers instead, and eventually draws a horse as well. When asked to name the horse, Jenna couldn't decide and used a name that Jason came up with instead.

Analysis

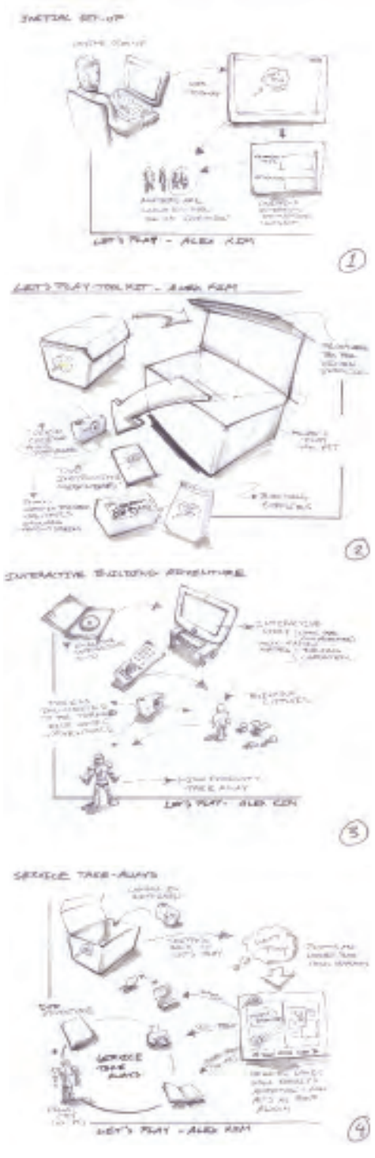
After observing the act of play in its context, several developmental skills were revealed. The following diagram shows the impact of play on various areas of a child's growth. This also revealed the use of play as a form of communication. By utilizing building toys, a connection between design, play and communication could be made.

Design = Play = Communication

The initial intent for this project was to promote an early interest in design. Since so many building toys such as Lego and K'nex already existed, this seemed like a logical step to make. These toys work well because children design and build through play. What emerged in the research however, provided an invaluable revelation. Since design and play are both forms of communication, it would be a unique experience to actively facilitate them all cohesively. This provided the foundation for the next step; ideation.

Ideation

The ideation phase lead to the creation of an interactive adventure service for parents and children. These would be provided through Adventure Packages that come in the mail.



Let's Play

is a

Service

providing an

Adventure Package

Let's Play Web Site

The Let's Play website allows family members to view their past adventures, rate adventures, request new adventures, and modify their characters. These are all accessed by logging in to the personal page.

determines content

During sign up, children's interests are entered in order to decided which adventures will be sent to the family. Content for Let's Play is dependent on a Child's interest or possible interest in a topic.

Adventure Package

The adventure package consists of a DVD, Adventure Supplies, a digital camera, and a return envelope.

DVD Adventure

The interactive DVD adventure is an interactive story determined by the childrens' interests.

Adventure Supplies

The adventure supplies include the toys and props necessary to follow the interactive story.

Digital Camera

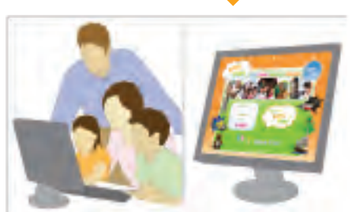
The camera is used to record the adventure. The DVD prompts when and what to take pictures of.

Return Envelope

The camera is sent back in a prepaid padded envelope. The pictures are used for the family's digital comics.

Family members can access digital comics of their past adventures. These comics can be printed, emailed or ordered in high quality prints. The adventures can be rated as well, affecting future adventures.

Scenario



Let's Play Sign Up

Let's play starts with the sign up process on the website. This is where the children's interests are given to Let's Play in order to determine which adventure packages to send. Characters for each family member are also created, these play as the actors in the DVD adventures. Once the family is signed up, members can login and view digital comics of their past adventures.

Receiving Adventure Packages

After signing up, adventure packages will be sent to the family. Inside the packages will be an interactive DVD adventure, adventure supplies, a digital camera, and a padded return envelope. All of the instructions will be included through the DVD adventure.

Interactive Story Telling

The first step of the adventure is to load the DVD. Once the story begins, family members will be prompted to make decisions which determine the outcome of the story. The content of the story will be dependent on the children's interests and the characters of the stories will be the family's online characters.

Building and Recording

During the DVD adventure, family members will be prompted to do certain activities or to pose for certain pictures. All of these activities follow along the interactive story allowing the story telling to involve physical play and interaction. The pictures taken will be used by Let's Play to create digital comics of the family's adventures.

Take-Aways and Camera Return

Once the adventure is done, the children are able to keep the building supplies and toys, and also the DVD adventure. This allows the children to re-experience their adventures and create new ones as well. The digital camera however, is sent back in order to create the digital comics which can be viewed and printed online. High quality prints can also be ordered from the website.

As video games and computers continue to take priority in childhood play, physical and social elements are often lost in the substitution. Let's Play provides a new means of family entertainment through engaging interactivity. This facilitates "family time" by involving everyone into the interactive stories. The take aways for Let's Play provide new ways to record family memories, while the activities involved are beneficial to a child's use of play as a developmental process.

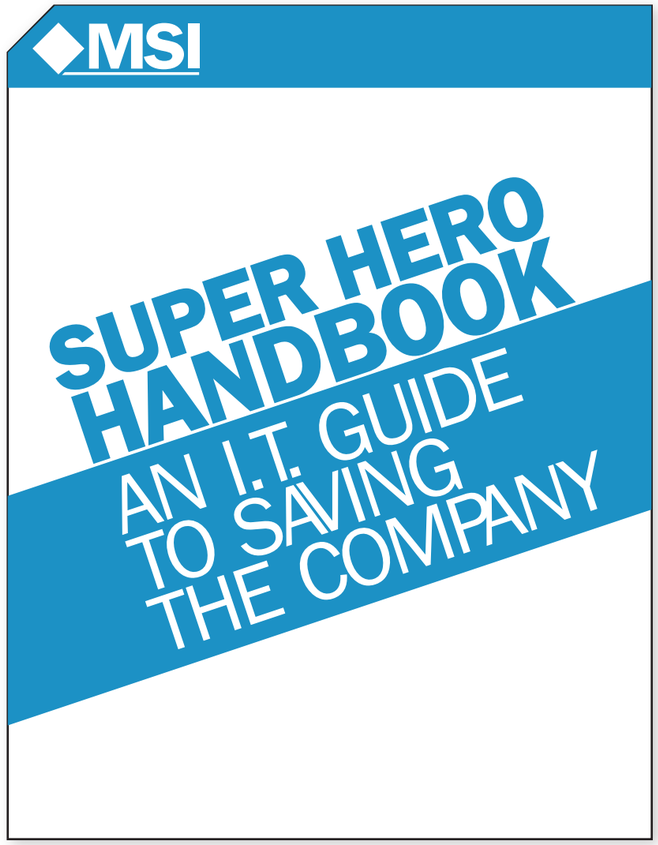
XK DESIGN

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

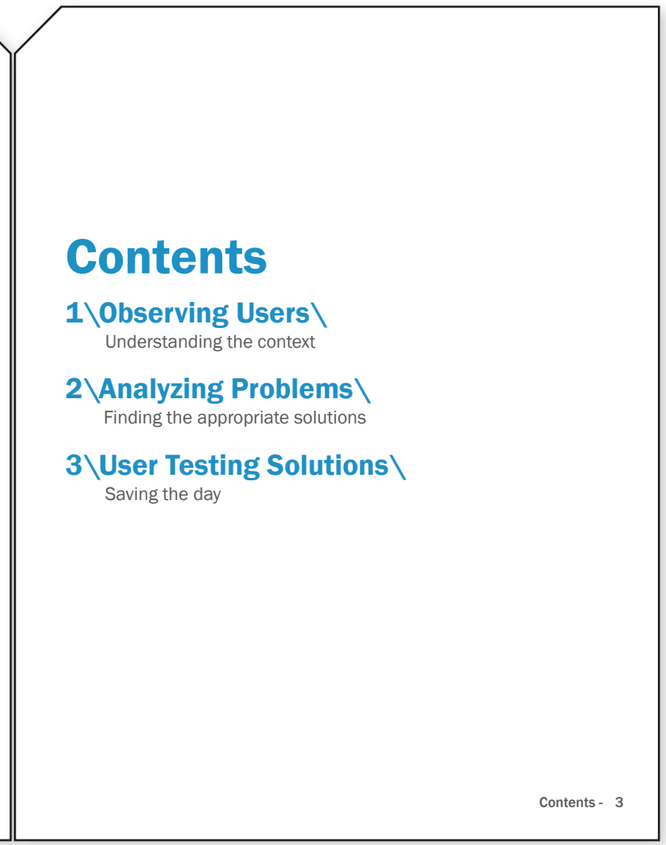
MSI

The *Super Hero Handbook* was created within a rebranding strategy for a company that was being consulted. Within the corporation, several logistics problems resulted from a lack of communication and misunderstanding. There was a clear opportunity to utilize the IT department to better understand the user's needs. What resulted was this book, as well as a user centered initiative within the IT department. The idea would be to have a full time or interim interaction designer to help train the IT department in conducting user research. By educating the team, real problems could be observed within their context and valuable solutions could be created.



The seemingly silly title was chosen as a rebuttal to the pretentious attitude many IT professionals garner. This was done to acknowledge their potential importance while suggesting that they require these skills in order to acheive that level of ability.

The book is written with a "call to arms" mentality in the hopes that individuals would be inspired to make the necessary changes.



The main goals of the book are broken down into three sections which explain contextual observation, affinity diagramming, and user testing. Each of the sections contains breif explanations and walkthroughs on how to conduct these tasks. By itself the handbook is limited, however the intent would be to have a designer or ethnographer on hand to assist in the training.

1\Observing Users\

Contextual Inquiry Walkthrough

The first section of the book focuses on conducting contextual inquiries. Basic guidelines are given as well as the benefits of watching users in their context. A walkthrough at the end helps people have a quick set of instructions on how to conduct a successful inquiry.

Observing Users

Contextual Inquiry

"...everyday tasks, real life problems..."

"...let them be the expert."

You're a busy person, but don't worry this will be quick and easy. Contextual inquiries are a useful tool in understanding software problems within the context they occur. Much like an anthropologist or ethnographer, the goal at hand is about observation. By watching the users do their everyday tasks, real life problems and situations can be observed. Once an inquiry has been scheduled, reconfirm with the user before hand. Let the user understand that you're just there to observe and that you might ask a few questions. Reassure them to do things as they normally would. Asking questions is good practice but let them be the expert. *Never ask why.* Asking why will make them second guess their actions and they'll behave differently than normal. If you really want to know why something was done, make an assumption as to why they did a certain action and try to confirm it with the user. This will give them the opportunity to affirm or correct you without making them doubt their actions. The ultimate goal is to see how the users perform their computing tasks. If something is being done incorrectly, *do not correct them*. Simply take note of the issue for later analysis. Pictures, videos, and audio recording can be helpful; however, notes are your best friend. Contextual inquiries should last about an hour in order to give ample time for anything to occur. The session can be finished when there is enough usable data. Go over your notes as soon as possible and record any insights while they're still fresh on your mind.

"...do not correct them."

"...notes are your best friend."

Observing Users

Walkthrough

Step 1 Plan

Schedule about an hour to observe a user during their normal work time. **Try to make it convenient for them.** When you meet with the user, remember to let them know you're just there to observe and ask a few questions.

Step 2 Observe

Pay attention to the details. One of the benefits of watching users in their context is the chance to observe problems which can't be recreated in an isolated environment. Try to learn as much about the user as you do their processes. **Understanding the user is the best route to appropriate solutions.** People are unique, and sometimes these nuances change the way they do their tasks. By understanding the user to this extent, solutions can be found that work for them on a personal level.

Step 3 Record

Take lots of notes. Take them in whatever manner is most comfortable for you. Audio and video can be very useful, especially as backup recorders; however, your quick jots will be much faster than searching through recordings. **Quotes are a good way to understand the user's perspective.** Again, understanding the user is just as important as understanding their actions. Don't be afraid to ask them to repeat something if you feel it was important.

Step 4 Reflect

Inquiries can be ended once enough data is gathered. When you leave the user, read over your notes as soon as possible. **Write down any new insights.** It's good to do this while the inquiry is still fresh in your memory.

2\Analyzing Problems\

Synthesizing User Research Affinity Diagram

Analyzing problems provides guidance on taking the raw data from the inquiries and synthesizing it into usable information. The method outlined in this section is utilizing affinity diagrams in order to organize problems and possible solutions. The guidelines are left loose in order to provide the freedom to use other methodologies as well.

Analyzing Problems

Synthesizing User Research

Congratulations, you've learned how to conduct user research. But research alone isn't going to save your co-workers, so it's time to find meaning in the data. Your notes and any video or audio you recorded during the contextual inquiry will be invaluable to you right now. They will be the biggest source of useful information in understanding the problems. Read through the notes, make connections, create ideas and learn the user. Understanding their desires and needs will make you an expert on helping them. Read the quotes and gain insight on their perceptions. Look back at where problems occurred and try to decipher why they happened. This is where you can show how clever you really are. It's time to fix what's broken.

"Understanding their desires and needs will make you an expert on helping them."

"It's time to fix what's broken."

Methods

- Process Flow Diagram
- Task Flow Analysis
- Transcription
- Affinity Diagram

Do what works best for you. Understanding notes and synthesizing data can be done in a number of different ways. You could treat it like a process flow and analyze the observed actions, or you could transcribe what happened and denote the breakdowns. It's all up to you. There's just one thing that's important. Identifying the problems, and understanding where they come from. As long as this goal is kept in mind, it's better to analyze your data the way you can understand it best. Some methods take a lot longer than others, however a very rapid and useful tool is affinity diagramming which is outlined in the next section.

Analyzing Problems

Affinity Diagrams

What are they?

In all reality, it's just a fancy name for a "post-it" note diagram, but it'll become one of the quickest and most valuable tools in your arsenal.
Why post-its?
They're fast, adaptable, and abundant. Sometimes affinity diagrams can get fairly large so it's important to be able to move things around and get rid of unneeded information. The purpose for affinity diagrams is to organize large sets of data. In the event of multiple contextual inquiries with large sets of observations, this can be useful in finding common elements.

Quick Guide

Find an empty wall.

Write out all of the observations on individual post-its and stick them up randomly.

If working with others, read aloud what you write.

Once there is a fair amount of post-its, begin organizing based on commonalities.

Look for categories and associations that can classify the observations.

How does this help?

Once you start to find similarities in the post-its, you'll begin to see categories emerge. When you start to group these post-its together, the diagram will begin to look a little something like this. Finding similarities can help you pinpoint opportunities of change, common mistakes, and common sources. All of these will be useful to you in creating an appropriate solution to their software problems.

3\User Testing Solutions\

Think Aloud Testing Walkthrough

The last section in the book teaches the team the basics on conducting a Think Aloud user test. By testing their solutions, the IT department can verify whether certain solutions will work or not. The section also mentions that steps should be repeated as many times as they require. Understanding that the process is not linear is the best way to make continual improvements.

User Testing Solutions

Think Aloud Testing

"You did the research, now let's save the day."

"...more direct insight into the thought processes of the user."

It's time to do what you do best, problem solving. You did the research, now let's save the day. Creating solutions is something that is different in every case, however once they're made, testing can be done using a standard method. We'll leave fixing the problems up to you, so let's talk about putting your solutions to the test. User testing will help you validate your ideas as well as finding any bottlenecks. This can be done in a very similar fashion to a contextual inquiry, except with a few modifications. This is a method called Think Aloud. With a Think Aloud, you'll set up a meeting, observe, and take notes the same way you would with a contextual inquiry. However, there is more preparation and moderation necessary in order to conduct the test. The benefits of the Think Aloud are very similar to the contextual inquiry, but it also provides more direct insight into the thought processes of the user. This is done by asking the user to verbalize their thoughts and actions as they occur. To conduct a Think Aloud test, a set of tasks should be prepared in order to test multiple facets of the software solution. These tasks will be presented to the user one by one. During the execution of the tasks, ask the user to say what they're doing as they do it. If they ever stop, just use this line, "Please keep talking." This will reveal their intent and how they try to achieve their desired outcome. Much like the contextual inquiry, *do not correct mistakes and do not provide assistance*. The user must be told at the beginning that you can't help in the tasks, but they are allowed to quit at any time. Frustrating the user is never a good thing. You're not a hero if you make them cry. When they finish the tasks, feel free to ask the user for any suggestions as well. After a Think Aloud is done, review your notes and recognize any changes necessary to the solution. Repeat this until it works.

"Please keep talking."

"You're not a hero if you make them cry."

User Testing Solutions

Walkthrough

Step 1 Plan

Majority of the methods used in the contextual inquiry are used again in the Think Aloud. The difference for the planning stage is in the preparation of tasks. These should be created in order to give a well rounded exposure to using the solution. **We want any possible problems to be revealed.**

Step 2 Conduct

Let the user know they can quit at any time, and that you can't help them. If they ever stop talking remind them to, **"Please keep talking."** Remember not to provide assistance or correct them. Listen to what they're trying to do and observe how they try to perform the tasks. If they can't complete a task after some time, suggest a new task. Keep the talking going until the end.

Step 3 Record

Use the same recording methods as the contextual inquiry. Audio recordings can be a bit more beneficial here since there is constant conversation. **Pay close attention to the details of software interaction**, this is where you can find improvements to the solution.

Step 4 Reflect

Before leaving the user it is sometimes beneficial to ask them for any suggestions. Once the Think Aloud is done, notes should be reviewed as soon as possible. The reflection for a Think Aloud should directly apply to the solution. Begin thinking of any necessary changes. After this, the analysis process could be revisited again if desired or required. **Repeat the Think Aloud as many times as necessary with as many users and solutions as necessary.** This is a continual process and should not be ended prematurely if definitive problems still exist. Once changes are made to the solution, test it again.

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

HOME

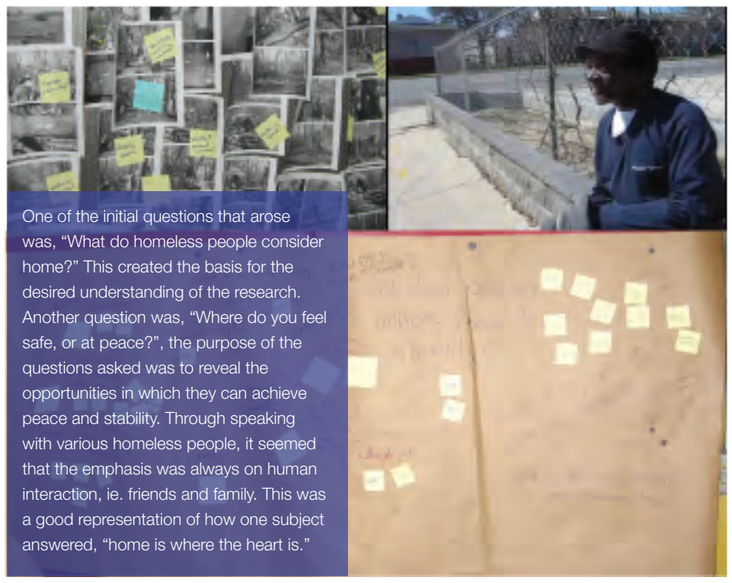
THE OTHER 90%

SCAD CONTINUUM

In the Spring of 2008, *Continuum* sponsored a 4 day design charrette hosted by the *Savannah College of Art and Design*. The topic of the challenge was to design for the other 90%, the population of the world whose income falls below the poverty line. Home was created to help provide Peace and Stability for the other 90% within North America.

RESEARCH

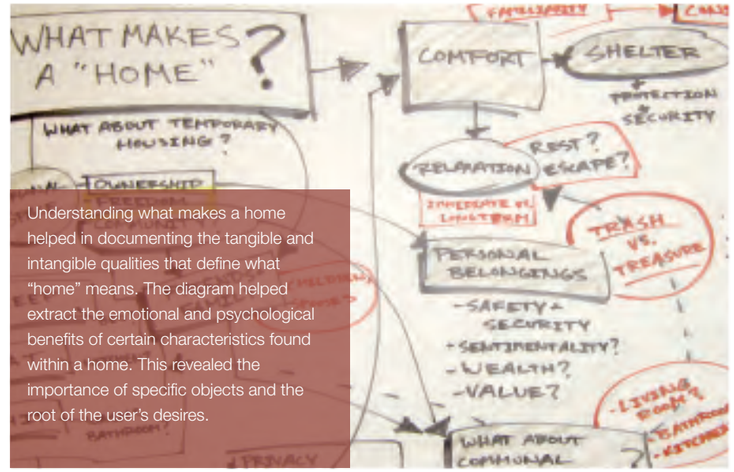
The Peace and Stability group for North America decided to focus on homelessness in Savannah, GA. Being in the target city provided an advantage in conducting first hand research which was done by going out and speaking with Savannah's homeless community. Homeless shelters and the Salvation Army provided the necessary research opportunities. Another place documented in the research was the "shanty town" where homeless people use makeshift tents to live in the woods outside the city.



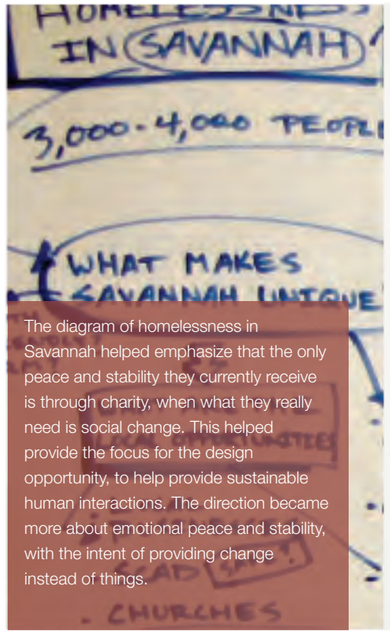
One of the initial questions that arose was, "What do homeless people consider home?" This created the basis for the desired understanding of the research. Another question was, "Where do you feel safe, or at peace?", the purpose of the questions asked was to reveal the opportunities in which they can achieve peace and stability. Through speaking with various homeless people, it seemed that the emphasis was always on human interaction, ie. friends and family. This was a good representation of how one subject answered, "home is where the heart is."

SYNTHESIS

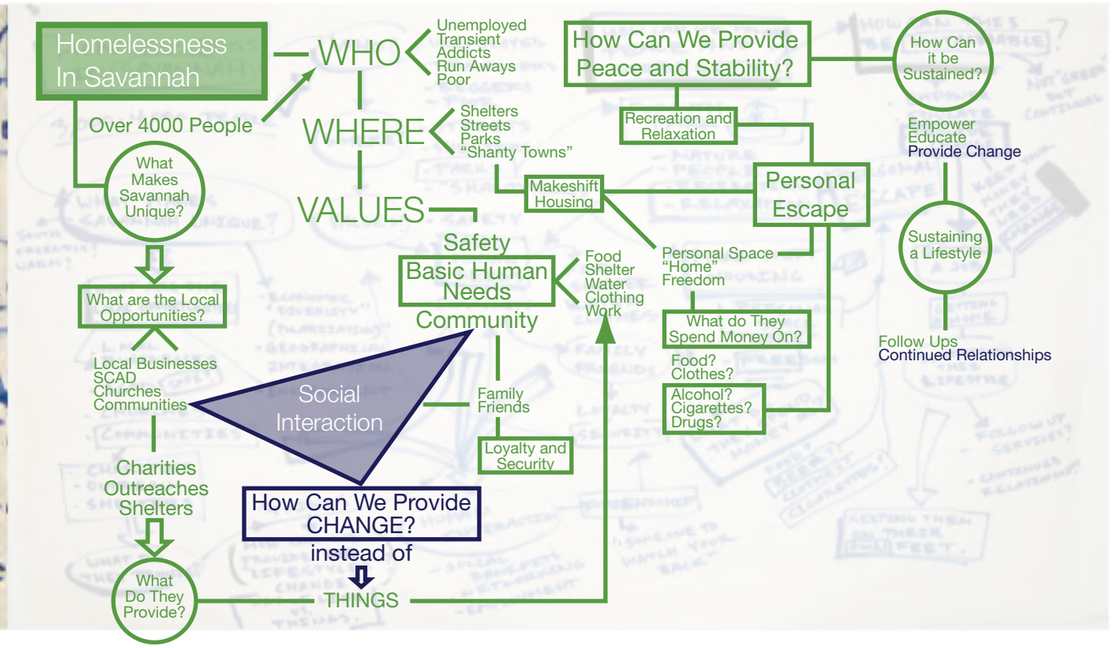
Once all the research was collected and analyzed, the take-aways were synthesized visually in order to diagram thoughts and ideas. Within these maps, a better understanding of the user was found, as well as several design opportunities. These diagrams visualized homelessness in Savannah, the needs of the user, and the meaning of "home".

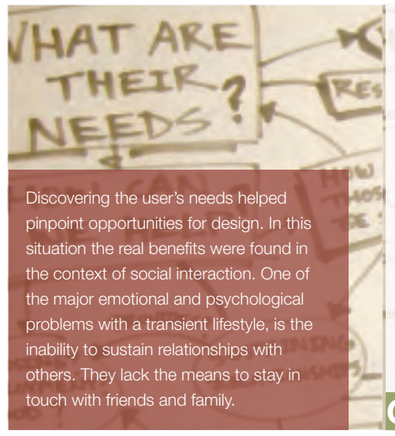


Understanding what makes a home helped in documenting the tangible and intangible qualities that define what "home" means. The diagram helped extract the emotional and psychological benefits of certain characteristics found within a home. This revealed the importance of specific objects and the root of the user's desires.



The diagram of homelessness in Savannah helped emphasize that the only peace and stability they currently receive is through charity, when what they really need is social change. This helped provide the focus for the design opportunity, to help provide sustainable human interactions. The direction became more about emotional peace and stability, with the intent of providing change instead of things.

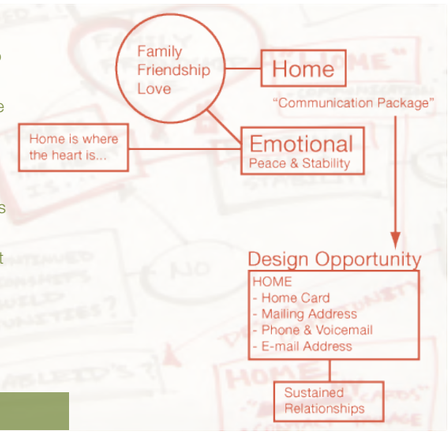




Discovering the user's needs helped pinpoint opportunities for design. In this situation the real benefits were found in the context of social interaction. One of the major emotional and psychological problems with a transient lifestyle, is the inability to sustain relationships with others. They lack the means to stay in touch with friends and family.

OPPORTUNITY

The design opportunity found was to provide a means for transients to sustain relationships with others. In their lives they meet different people all the time, some of which could possibly help, or just be a friend. Unfortunately, the current situation is a lifestyle of temporary friendships and limited human interaction. Emotional poverty is something that charity can't provide for.



SOLUTION

Inspired by initiatives such as Google's free telephone service for San Francisco's homeless, Home was designed to provide various means of free communication. Existing services hope to provide the homeless a way to get employment, however Home's emphasis is on maintaining relationships with others. The ability to be contacted by possible employers is an inevitable benefit of the system, but the real social value is providing emotional peace and stability through friends and family.

WELCOME HOME

The purpose of Home is to provide The homeless the means to stay in touch with people they meet. When someone signs up with Home, they receive a *Home* and a stack of *Home Cards*. The *Home* is a card carrier which can be used to store the *Home Cards* as well as *Home Cards* of other people they may meet. On the *Home Card* itself, members can find their name, toll free number, email address, and P.O. Box mailing address. By providing exchangeable cards, members of Home can maintain a network of relationships in order to improve their quality of life.

The main purpose of the *Home Cards* is to give people something that they can exchange with each other. Similar to business cards, the paradigm of exchanging contact information can now be experienced by the homeless. This facilitates a network for this culture to thrive in. The intended benefit is emotional stability through maintained relationships. One of the inevitable benefits would be the possibility of people helping each other through jobs and support. This outlet allows for new means of providing help to people in need. Since social workers and community service activists can also join, the potential for beneficial growth is exponential.

INITIATIVE

In order to provide the services of Home, it would require a volunteer initiative from local businesses and public locations. These places would act as Home centers, which would be designated by a sticker in the window. The requirements of volunteering a business would be to act as a Home service center. This is where anyone could sign up for Home, not just homeless people. If more *Home Cards* need to be ordered, that can be done at these locations as well. Home would act as a community service initiative as well, since social workers and those who want to help out can join Home in order to stay in touch with people in need.

If a member of Home wants to retrieve their mail, they can go to one of the Home Center locations and request it be forwarded there. The business would simply contact Home and request the member's mail via name and Home ID number. Within a couple of days their mail would arrive from Home's central P.O. Box center. The P.O. Box would then continue to collect mail until another forwarding request.

Home's phone service would provide a toll free voicemail number. This would allow members to check their messages for free from any phone. By utilizing the personal extensions, Home members can leave other members messages and return received messages. This allows for friendships and relationships to be sustained in a more personal manner.

Various public places offer free internet use which can be utilized to access Home's email service. Since technology is changing their culture as much as it is ours, providing them the means to communicate on the web is just as important as other methods. With a new generation of homelessness, utilizing the internet to find jobs can yield better results.

RELEVANCE

One of the things that was discovered during this project is the realization that homelessness exists as its own culture. Finding relevance within this context was something that could easily be overlooked through charitable efforts. The obvious desire would be to provide homes and jobs for these people, however these are things they aren't currently being kept from. Charities and non-profit organizations do a great deal to provide for the homeless, however their emotional and psychological quality of life is weakened by the inability to maintain relationships or forge new ones that last longer than a few days. These are things that charities and organizations can't help with, and is something that Home could provide.

Alex Kim
www.alexkimdesign.com

912.695.0592
alexkim804@gmail.com

Resume

Education

B.F.A. in Industrial Design;
Interaction Design Minor
Magna Cum Laude
Savannah College of Art and Design - Savannah, GA;
Class of 2008

Experience

Industrial Design Intern
Kids II - Alpharetta, GA
June 2007 - August 2007
-Ideation
-Sketching
-Computer Modeling

Volunteer - Design Committee
CHI 2009 - Boston, MA
CHI 2008 - Florence, Italy
September 2006 - Present
-Visual Design

Design Consultant with The StatDoctor
MedSolutions Inc. - Franklin, TN
October 2007 - June 2008
-Workflow Design
-Contextual Research

Interaction Designer
TheStatDoctor - Savannah, GA
August 2006 - Present
-Interface Design
-Usability Testing
-Contextual Research

Sponsored Student Project
JCB - Savannah, GA
September 2007 - November 2007
-Sketching
-3d Modeling

Activities

Intern
Korean-American Society of Greater Richmond
September 2003 - June 2004
-Experience with a non-profit organization
-Graphic Design
-Community involvement

President
Richmond Korean Presbyterian Church - Youth Group
April 2003 - May 2004
-Leadership experience
-Administrative and managerial experience
-Community involvement and service

Skills and Knowledge

Industrial Design
-Design Research
-Sketching
-Model Making
-Alias
-Moderately trilingual:
English, Korean, and Spanish
-Presentation
-Human Factors
-Rendering
-Adobe Creative Suites
-Rhino

Interaction Design
-Human Computer Interaction
-Information Architecture
-Contextual Research
-Usability Testing
-User Experience
-Flash
-HTML / CSS

Awards and Recognitions

Academic Scholarship - Savannah College of Art and Design, 2004 - 2008
Dean's List - Savannah College of Art and Design, 2004 - 2007
Top 10% of Graduating Class - Monacan High School, 2004

XK DESIGN

Thank You

Alex Kim

912.695.0592

alexkim804@gmail.com

DESIGN