Week 12

Based on your informances and scenarios where you likely used props or a low-fidelity prototype, develop a medium-fidelity prototype in that incorporates greater functionality and usability. The aim of the prototype is to explore the look and feel of the design and its potential usability.
The prototype should be sufficient to create a level of interaction required for useful user feedback.
You may require hybrid prototypes that split the technical from the user experience goals.

Mark Week 11 Notes
Lecture:
- He expects us to run a pilot study to test it out
- When you run the final study, don't change the instructions from person to person
- Make sure to thank the users and reassure them if needed (they may feel stupid if they've been struggling with a klunky interface)

Lab:
- Various feedback on workshop improvement...
- Group activities seem to work well for them
- Traits we can use:
  - supportive
  - attention to detail
- The designs the users produced are symbolic triggers (like our probe package magnet)
- Symbolic images were common throughout
- Offering encouragement to troubled members instead of bringing troubles out to the group.
- Or, encouraging people to share as another angle.

Findings from last week:
1. Selective levels of participation
   Participants were more engaged with the icebreakers at the beginning of the workshop compared to the interview and ideation phase.
   We assume this difference in engagement level implies that the group enjoys doing activities together and is fairly close in and outside of the group.
2. Supportive behaviour
   During the story creation some participants had trouble with continuing the story. However, other participants were eager to help them continue the story.
3. Attention to detail
   It felt like the participants were giving too much thought and putting a lot of effort into creating a story, which was intended to be a fast paced exercise where it explored participants' imagination.
4. Irrelevant to design
5. Irrelevant to design
6. A digital/physical hybrid design would be acceptable to group members
   During the Design/Creation phase Blue based his suggestion off of existing practice of writing a letter and sending a text message on a cell phone - incorporating digital and

physical forms of communication.
7. Forms:
    a. As said before, Blue developed a letter & text message model.
    b. The Talking Banana is an adaptation of the "Talking Stick". Red chose a banana form, because it resembles the shape of a telephone receiver and she likes bananas.
    c. Green drew a teddy bear because it was a significant present that provided her comfort and she felt that it could possibly recreate this experience for some else.
    d. Yellow didn't really say much about the balloon other than that she felt it was an item that would encourage people to relax and de-stress.

Due Week 12 - Lab

The purpose of this meeting is to look over your usability test script and give feedback on improving it. Also, a good time to check in on how your prototype is going and provide suggestions / technical advice. We are also doing TA evaluations that day, so it would be good to go to your meeting / lab

Avenue 0: Tree

- Alice and Mark don't know much about this, so we couldn't pursue it further at meeting start

Avenue 1: Companion Cube

- previous idea, just incorporate a new form into it
- cube as an avenue of "play"? make it feel less serious?

Avenue 2: Bubble Magnet

Rationale:
- Anna was talking about us incorporating the magnet idea into our design
- Imagine an unobtrusive trigger that could allow them to see what the group is feeling
- Maybe looks like a button or magnet or something. Something small that would easily fit in with their everyday
- Maybe have each person input 1 phrase, and it switches through the phrases?
- Each time you add a phrase your last one is overwritten. There are no identifiers on the phrases.
- We don't have to do a hi-fi prototype, we just have to test the interface. Thus networking is not an issue - we don't have to make it network =)
- Not sure if we want to use phrases or other media - both are possible avenues
- Answers the question they asked a few weeks back - why make it digital?
    - Answer: to allow the group to "feel" their vibe when they are not meeting =)
    - digital by virtue of networking
- Drawing from forms:
    - Blue's form: personalizing text messages
    - Yellow's form: balloon idea extension: when you pop the balloon, the message is gone. same with the virtual thing, when you put a new phrase, the old one is gone XD
- Possible form:

- o maybe a magnet that looks like a bubble
- o when you touch it your phrase appears and "pops"
- o then a keyboard appears on the magnet and you type something else in
- o impractical to make in hi-fi, but if the tech existed they would use it
- o and could be "screen" prototyped by us
- o worried about keyboard size - what if magnet is small?
  - ■ projected keyboard?
    http://www.biztoolbelt.com/uploads/5CellulonCL850VirtualKeyboard.jpg
    - possible issue with projection surface - if this hangs on a mirror or glass surface it could fail to leave an impression or hurt the eyes
    - pursue this angle if we go hi-fi?
- o we aren't making it an app, because then it becomes less personal. Cell phones are more "in the open" devices. If we separate this it becomes a "private" device, increasing willingness to share.

Script: Usability test
Possible Criteria
- Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?
- Efficiency: Once users have learned the design, how quickly can they perform tasks?
- Memorability: When users return to the design after a period of not using it, how easily can they re establish proficiency?
- **Ease and effectiveness of navigation** - Do users find what they need easily. Is there a clear pattern to the navigation that fits easily into the users mental model. Are you links labeled with terms that make sense to your users. (Or, are you speaking in your own private jargon!)
- **Usefulness of content** - What information do your users want/need? Have you organized the content on each page in such a way that it is easy for your users to quickly find it? Or do they have to read all the fine print while standing on their heads?
- **Effectiveness of presentation** - Did the graphic design, fonts and colors highlight the navigation and content, making the site easier to use? Or did the presentation distract or create a barrier between the user and the information?
- **Task success rate** - Were the users able to accomplish the key task they needed/wanted to accomplish. If they were able to complete the task, did they feel satisfied, neutral or angry and frustrated?

Format:
- Testing for
  - by looking for

Outline (v1)

- Effectiveness
  - How was the layout? Did the layout design, and colour scheme make the naviation process easier or did it distract the user?
- Efficiency
  - How effective was our interface? Did it allow the user to achieve his or her objective the fastest way without going through unnecessary menues/interfaces?
  - How fast can the user type up a message?
  - Quantitative: speed in completing tasks
- Usability
  - Quantitiative: when did the user pause?
- Learnability
  - Was our interface intuitive? Was the user able to understand and learn the interface without requiring too much work?
  - Quantitative: did efficiency increase over time?

Outline (v2)

- Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?
  -
- Efficiency: Once users have learned the design, how quickly can they perform tasks?
  -
- Usefulness of Content: What information do your users want/need? Have you organized the content on each page in such a way that it is easy for your users to quickly find it? Or do they have to read all the fine print while standing on their heads?
  -
- Effectiveness of Presentation: Did the graphic design, fonts and colors highlight the navigation and content, making the site easier to use? Or did the presentation distract or create a barrier between the user and the information?
  -
- Success Rate: Were the users able to accomplish the key task they needed/wanted to accomplish. If they were able to complete the task, did they feel satisfied, neutral or angry and frustrated?

FEEDBACK FROM ANNA:

→ Are people comfortable sharing their thoughts with this?
→ Good way to share and get feedback from people within the group?
→ May want to add a button to enable the keyboard, and turn function to lock
→ Have pre-made messages, that could show one line
→ Find when people would want to send messages, or when people would want to read messages
→ focus finishing this prototype by Friday/Saturday
→ need to figure out the usability of the device before start testing the device

TESTING IDEAS:

Having the users to "type messages" in small cubicle environment..giving them a time constraint for how long they have to write a message. Then we'd collect the messages from each user, then randomly shuffle them, and then re-distribute them to each member's message tube.

Giving them scenarios, of where they could possibly be when receiving and sending their messages

Questions to ask users:

1.)Some questions surrounding emotions/how they feel, reacting to this prototype or device
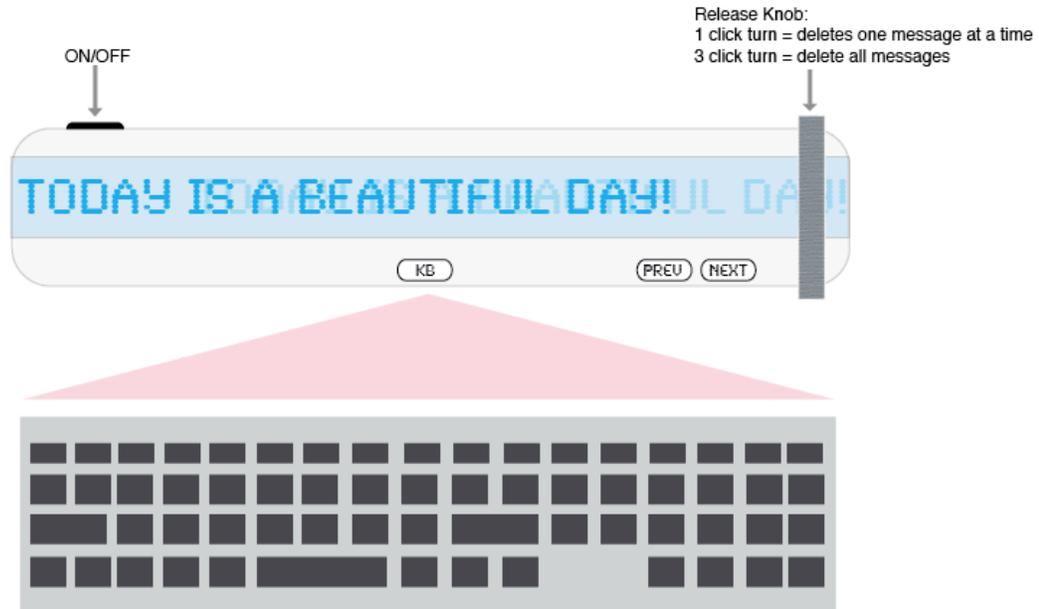2.)What sort of solutions they can find if they see a problem displayed on it (similar to the scenarios)

Week 13 (Final Week)

Deliverables

1. **Final Portfolio Document**, with 7 sections:
    a. Executive summary of design proposal
    b. Rationale, including issues addressed, benefits and implications
    c. Prototype of design intervention and refinements made
    d. Results of evaluation
    e. Final scenario of design intervention
    f. Discussion of what your team learned.
    g. Appendix to include all documentation including videos, early sketches and PD workshops.
2. **Video of System:** A video less than 3 minutes in length that presents the final prototype in the form of video scenario demonstrating the situation of use.
3. **Final Presentation:** A 10 minute presentation in lab that clearly summarizes your design proposal and its design value, presents the final prototype in the form of video scenario demonstrating the situation of use, provides a rationale for the design decisions your team made leading to the final prototype, and a summary of the evaluation (user feedback session). Also prepare a digital executive summary poster presenting your final prototype.

Current Prototype: "message in a pipe?"

- Draft

Release Knob:
1 click turn = deletes one message at a time
3 click turn = delete all messages

ON/OFF

TODAY IS A BEAUTIFUL DAY!UL DAY!

KB   PREV NEXT

LEGEND:

KB = Activate/Deactivate Keyboard
PREV = Shows previous message
NEXT = Shows next message

1:

- Our product is a pipe-like object that allows group members to stay connected outside of their youth group meetings. All members are given this item. The pipe gives people the opportunity to type in messages and when sent, will be viewable by all group members. Because all group members are given a pipe, the identity of who sent the message is left anonymous but if one desires viewers to know who sent the message, can also enter his or her name in the message. The pipe's memory only stores one message per member so when a second message is sent, the previous message entered by the same member is deleted.
- Product Features:
  - an ON/OFF button is located on the top left of the pipe
  - a twistable knob is located on the right
    - if the user wants to delete ONE MESSAGE at a time, the user MUST turn the knob ONCE (ONE CLICK)
    - if the user wants to delete ALL MESSAGES, the user MUST turn the knob THRICE (THREE CLICKS)
  - The KB button activates the INFRARED keyboard to appear. This feature was implemented so that typing a message would not be limited to a screen keyboard. The infrared keyboard gives the user a full size qwerty keyboard to type.
  - The NEXT and PREVIOUS buttons allows the user to scroll through the message

Storyboard
- Person A would like to share a message with the rest of her group
- She pulls out her message tube and sets it down on a table surface
- She turns the knob to unlock the function of the tube and it brings her to a blank interface which informs her she can begin typing
- She presses the KB button, which informs her that the infrared keyboard will enable
- She types her desired message and then hits enter on her keyboard

1.) Excitement, because I could write a message and anticipating a new message from someone
2.) Depending on the messages, we can be more inspired between each other
3.) It's a great idea, because it gives people a forum to say what they want to say, without any judgement
4.) You're actually being connected to people who you want to be connected to, but still lets you be anonymous
5.) Because it's anonymous, it'd be more easier to help people with advice or seeking solutions. There wouldn't be a lot of weight on our shoulders or someone elses
6.) Add sound effects
7.) May work if its more flatter, and more portable
8.) I think it's a brilliant idea
9.) I can see this being used in Youth Camps, because it'll make them feel more connected
10.) For people that do not have a lot of friends outside of the church, it would work well