CS 465 Principles of UI Design – Homework 4
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Cell Phone for the 22\textsuperscript{nd} century

Product description:

- The product comes in the form of a hooded jacket.
- The cell phone speakers are embedded in the hood of the jacket on the right and left sides of the jacket near the ears.
- A microphone is embedded in the inside collar of the jacket.
- The user can use his voice to access various commands.
  - If the user needs to add a contact, all he/she has to say is to say “add contact” in the microphone and the user will be prompted to say the contact name, number and other information. This is the same with delete contact.
  - This phone has all the same features as a regular cell phone except that the user interface is much more interactive. Instead of having to press keys, the user says commands in the microphone/hood and the phone will prompt with further instructions in order to complete the command.
- The jacket is completely customizable. This jacket is a huge leap in the field of nano-technology. It contains millions of tiny cameras. Each camera is responsible of projecting a single pixel. The jacket can be hooked up to a computer. The user can download various designs for his/her jacket from the Internet. The jacket also allows the user to have his/her own customizable design. The user simply has to draw a design and upload it to the jacket. They can also use a computer to create their own design and upload it to their jacket. Once the design is uploaded to the jacket, the nano-cameras which are in the jacket projects that design to the viewers.
- When a speaker is engaged in a conversation, the jacket will automatically display message, warning others that the user is engaged in a conversation. This message is also customizable.

Who is the audience for your particular phone?
Through this design, I hope to attract people with disabilities. Although the targeted audience is handicapped people, this new phone can be used by anyone.

What is the motivation for you design?
Most people take multitasking for granted. For instance, we see many people using their cell phones walking on the street. However, people with physical disabilities do not have this luxury. For example, if a person in a wheelchair wanted to speak to someone on the phone while he/she is moving, it is not possible. This is because the person in the wheel chair is using his/her hands to move forward. This cell phone design is targeted at solving this problem. Also, some people with disabilities may have a difficult time hold the phone to their ear for long periods of time. This phone’s design eliminates this problem, since users will not have to hold the phone to their ear.

How is the motivation rendered in the design of the phone?
The design of the phone is such that the users won't need their hands to use the phone. All of the features/functions of the phone are entirely voice activated. This makes it possible for a people with disabilities to talk on the phone while completing their day-to-day activities.

Does the design allow for completion of the intended task?
Yes, this new design makes it possible for the user to talk to other person on the phone.
Scenario
Draw a scenario of the phone being used. Be specific with both sides of the interaction and the details of the scenario. How many button presses are necessary for the interaction? Where does the user carry the phone? Is it embedded in clothes or a separate object?

This is the device that enables you to talk without using your hands. The user need not press any buttons for the interaction. The user wears a jacket and the phone is embedded in the jacket. When a user receives a call, he/she is notified through the speakers. The user is notified by a voice saying, “You have an incoming call from x” where x could be the name of the person calling, caller number or unknown. Then the user can choose to pick up the call or ignore it by saying “answer” or “ignore” respectively.

Here is an example of an interaction with someone who has the phone and one of his friends.

Phone - “You have an incoming call from Bob.”
Alan - Answer. Hi Bob. How are you?
Bob - Fine. Where are you? We were supposed to meet up 15 minutes ago.
Bob – Oh!!! I see you.
Nice you got he new phone. Nice buy. I'll talk to you in a bit.
Alan – I'm actually crossing the street right now. I will be there in two minutes.
Alan – Thanks. I will see you in a bit.