Zeynep Selçuk

"TalkToMe"
-An interactive shoe

Project definition

Designing and making a shoe which reflects profile of wearer

Objectives & goals

- It will provide people to express their selves in a different way

Introducing our selves via wearable technologies will help us to see our and others personality in a physical way. We always talk about our personality, our hobbies, likes and dislikes and most of people like to talk about themselves. So, this interactive shoe will talk about personality before she/he does.

- More understandable and healthy relationships.

If we had a chance to develop mutual language by using a wearable, this will create a new way of understanding the people that acquaintance or we are not familiar, and helps us continue to develop our friendship or relationship by this seeing an information that belongs to language of that product. Also, other people will see how we introduce ourselves to environment and acts will be change accordingly.

- Developing mutual relationships

Besides creating mutual language helps to create more understandable and healthy mutual relationships. For example, we can see if someone is into topic we want to talk about that we are also in it gives us a chance to connect with him/her easily. Also changing topic in conversation, knowing what someone pisses about, his/her likes or dislikes gives us a clue what to do next.

- Connecting with the product in a spiritual way

Researches indicate that people expect more and more in human products. People express themselves, their emotions like shouting at the monitor, shoving the chair away. In some way we are always in connection with products. Also, we buy products according to our interest; we want them to show our personality in some way. For example color and style of clothes, cars, design of home, they all give us a clue about personality.

Target audience/user

 The target of "TalkToMe" is women and men. Especially between 18-40 year old. The reason why I choose those ages is the shoes flashy appearance. There will be no distinction in sexual

preference. They can be gay or straight because one of the specialties and going to show this concept but other determining differentiations steps in. Firstly, the economic status of wearer is important for every age of buyers. People whose income are normal and above the normal, more likely to acquire that kind of shoe, even many people who have a normal status of life can be found it unnecessary to have something like this and could not obtain. In this situation other determining factor makes it more clear which we can call personal style of life-mode of life and likes and dislikes. This mode of life can be understood by knowing what kind of job that he/she works, how they wear; classic or different style, if she is opened to changes or not. General profile of the consumers can be define as social people who like interacting with new people and like to get to know them better. They also like to share information about themselves to others. Other group can be defined as people who are lack of self confident but want to share special information.

Background information

After my internship decided to be a shoe designer and this is the reason of why I want to design shoe which has a different purpose then others. After my research I find out that wearable can turn in a multimedia display according to interest of producer like changing patterns, changing composition and becoming in an expressive form. There were many ways to transfer it to multimedia object. Firstly expressing emotions through wearable took my attention and searched it.

In my research, I find that mood started to play important role in designs then before. Detecting mood started with the mood rings but it had efficiency because they were just changing due to temperature. Innovative designs get a head by detecting emotions more precisely by detecting other values in body and applied it to better products. Such as Philips designs in clothes, necklaces and furniture. After so many researches, we argued and decided that people may not want to show their real emotions to others. The ways they want to express them and how they behave to others shapes and develops his/her personality.

So I decided to make a shoe which can reflect personality profile of wearer. In recent years people are very connected and interested to specify their profiles. Facebook and Twitter are the examples of it. They answer some questions like age, relationship status, family, interests, favorite movies, music etc. They do it for others to know about their selves. We also look at others profile. People are curious about learning about others and introducing themselves

These wearable can also allow wearers to refresh the appearance in parallel to changeable interests. Our interest, likes, dislikes can change and we can apply it to the product at anytime If we don't like the way we represent our selves before we can update it like in Facebook status.

In other words, the combination of two technology, computation and materials creates new form of expressing and people always try to enrich the communication in some way. For example this technology can be used in other areas like using it on people who are lack of self-confidence or people who can't speak or express their self properly like autistic and understanding their needing better.

Interaction between two or more people will have much healthier with observable clues. These clues will give a chance people to change their behaviors and reactions suitably. People will give information about their selves and learn of others by non-verbal communication.

Also, if we can observe the clues about person, that will help us to advance communication skills with him/her .This can also effect healthier relationship with somebody when our attitudes for them changes according to their interests. Needles to say that other person will behave exactly like us by observing.

By doing this project I will both improve my skills in shoe design and interactive technology. I will show how persons profile plays a vital role in product appraisal and appearance. Personal usage with interface becomes an important part, objective of interaction design that used in wearable. Furthermore this project will help people to connect each other much more. This project will be giving a chance wearer to redesign the design.

I have searched many industrial objects like Philips's led lamps can change color by using the touch-sensitive color wheel and can match to anyone's mood, also it makes change in appearance of walls by reflecting. The other project that I have found is the emotion detector which was designed by Affectiva's doctors to observe autistic children's emotional change which is known as Q sensor. Q sensor detects and record physiological signs of stress and excitement by measuring slight electrical changes in the skin. They are all involving users in design in some way. Q sensor projects aims same goal in some way with my project, helping and giving a chance to people express themselves.

As I mentioned Q sensor project, I need to explain it detailed to understanding the approach of my project. Q Sensor designed for "detect and record physiological signs of stress and excitement by measuring slight electrical changes in the skin." in autistic children firstly. They needed to learn about how they feel, what they like, what annoys them etc. to communicate them better. Their information transfers to computer. This aim of Q sensor designed by Affectvas doctors makes my point clear. I want to show what we like, what not by using an wearable but the difference is information of people will transfer to wearable from a user interface which user will fill.

http://www.affectiva.com/q-sensor/

Social networking sites can be another example which uses the personal information to create profile. I searched what Facebook ask people before sign up; interested in: women, man, relationship status, work, education, music, sport, interests, religion, politic views etc. Then it creates our own page.

My aim in my project is to create a shoe which creates its own appearance and this appearance can be changeable according to personal information.

Detailed project description

I will be designing an interface that contains questions about personal info to give a color according to them. Information will transmit into led as a change of color. Each color will represent a sign about wearer. It will have a mutual language that would be read by other users. I am thinking about embedding led into transparent heels and it will have a specific color- black that will accommodate with each led color.

Here are my shoe sketches; I am thinking about using layers in heel for information.

Each layer will represent different information about user. For instance; relationship status; also contains gay or straight, daily mood, and kind of music he/she likes, professional group. They will be appearing after I make a questionnaire for what people want to see about other people.

*User centered design

-working with target users to learn what to add, show what, what they don't want to see, I will be getting feedback.

-interface design and design of the shoe should be easily recognizable and understandable.

-Mutual language should be easily understood. Specific colors and information will be added to eliminate complexity.

 Required know-how and resources

Needed know-how and abilities

*Color and psychology

Which color should be chosen to the result of given information. For instance green represents peace, yellow anger etc.

*Type of interface

Making a system easy to use for intended users. It should be understandable and basic

*Making an interface

Contains personal information and questions

*Using Arduino

Connecting led with interface

Needed resources

A place where can supply shoe materials, I have an experience about making a shoe but I need to find a manufacturer which can make me transparent heels. Also I need a help with coding part and interface.

Difficulties & risks

Embedding materials into heels should be done skillfully, if the appearance looks bad from outside that would give negative sense. Interface should work properly; Led should change color correctly parallel with given info.

Phases of the project

-Research about wearable technology

-Research about usage of personal information to create personal sites, etc

-Research about what people want to see on other people, the necessary and unnecessary ones.

-Combining color with information: ex: red color represents anger, blue represents tranquility

-Creating interface

-Collecting equipments: led

-coding with Arduino

-shoe designing

-putting leds into shoe

-Experiment the correction of color changing parallel to changeable info.

Criteria of success

If color changing collinear truly with profile changing, means that the project becomes success

.**Gannt Chart**

Task	Dec 49	50	51	52	Jan 1	2	3	4	Feb 5	6	7	8	Mar 9	10	11	12	Apr 13	14	15	16	May 17	18	19	20	Jun 21	22	23	24
Research about wearable tech		■																										
Research usage of personal inf					■	■	■																					
design of the shoe system					■	■	■	■	■	■	■	■	■	■	■													
Prototype						■																						
Interface design									■	■	■	■	■	■														
Decision of colors, effects										■																		
Collecting equipments; led											■																	
Arduino and coding									■	■	■	■	■	■	■	■	■	■	■									
Making shoe							■	■	■	■										■								
putting led into heels																		■	■	■	■	■						
Testing																					■	■						
Sunum Hazırlama																						■	■	■	■	■	■	

RESEARCH — Wearable Technology — Personal Inf. User Profile — Color Representation Research

VISUAL — Shoe System — Style of Shoe — Leds positions — Color Combination — Interface Design

TECHNICS — Arduino → — Coding ← — Interface — Testing