SMART BAND

Team Members- Gaurav Sharma, vihang agarwal, shiv ashish k gupta, prawaan singh, sanjay ramesh, sunil mishra

OVERVIEW

smartband will be a new and interactive way to share your information with new people you meet allowing you to store and share details which are in your interests. smartband is a wearable product involving interaction with your personal device and internet.smartband is a technology-enhanced bracelet that can store, display, and exchange information about you and your relationships. This exchange occurs during a common user-initiated handshake.

FEATURES

smartband involves the following features :
1.our device will be able to share and store information.
2. it will maintain an organized database of all the individuals met through an app
3.it will allow the user to control the amount of information being shared
4.the app will allow user to know if he had contacted the person before or not.

IMPLEMENTATION

1. to detect a handshake we are planning to use IR transceiver alignment, proximity sensors and pressure senses(we can also use muscle tension in the wrist to indicate a handshake)
2. the band will contain a microcontroller that will always contain the basic information of the user and ability to store some data from the guest.
3. both bands will contain a bluetooth connection so that they can interact.
4. whenever it finds a connection to the personal device the band will automatically send the information stored through bluetooth.
5. the app will only detect the connection to the personal band.
6. if this project gets completed before time then we were thinking about adding some add ons- like enhancing the way band interacts with the user and the guest and add speech recognition system to it.

TIMELINE

we plan to complete the project within 40 days

1. before the start of the project and first 10 days to work on the hardware design and learn language for app development

2. next 15 days approximately to build up the hardware and develop the structure of the app.
3. next 10 days work on debugging the app and sort the problems arising.
4. if everything goes as planned then give a few more days to add ons and additional features.

HARDWARE REQUIRED

the following hardware is required:

1. proximity sensors
2. pressure sensors
3. microcontroller
4. LED's, IR transceivers
5. bluetooth module
6. band made of velcro
7. smartphone

REFERENCES (existing work)

this has not been implemented on a larger scale but some local work exists . references are as follows:
1. iBand by europe media lab
2. smart its friends- A Technique for Users to Easily Establish Connections between Smart Artefacts
3. Group Wear: nametags that tell about relationships.

ROLE OF EACH TEAM MEMBER

our work involves two basic work: the hardware design and app design.

hardware design- sunil mishra, gaurav sharma, shiv ashish

app design- vihang agarwal, prawaan singh, sanjay ramesh

CONTACT DETAILS

Gaurav Sharma-07755047927
vihang agarwal-07054423795
shiv ashish k gupta-07755047940
prawaan singh-08604926690
sanjay ramesh-07755047993
sunil mishra-07839984140