Chapter 2: State Of The Art: Contents.
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20170303-1334-GMT+2.

Meme Tag.

Meme Tag is dated as early on 1997, when the term meme still meant culture's DNA. The Meme Tag was used in a conference. Its user starts by visiting a booth and set what is their idea in a short sentence. When the wearers of Meme Tag meet to each others, they can tap it to exchange the meme that previously set. This tag was used primarily to see on how people connects to each others.

Hardware wise it has a 16 x 2 LCD panel to show the meme. It connects to each other through infrared and presumably also connect to the computer in the booth by the same methods. And it used mc68hc11fncfn3 chip from Motorola as its main processing unit.

UbER Badge.

UbER Badge takes inspiration from Meme Tag then Thinking Tag. The badge functions nearly the same with Meme Tag aside from UbER Badge has both RF and infrared connection. It has peer to peer connection as well to hop its messages around the other badge, hence its users are not neccesarily to tap their badge close. The infrared connection is used to detect line of sight communication. For inputs, this badge has a simple two pinned electret microphone to capture the features of any sound received by the microphone. And instead of using LED display UbER Badge uses LED Matrix to display data in form of graph or simple alpha numerics.

Sociometer.

There was a wearable device named Sociometer that is the only devices listed in this chapter that is not in form of a badge but shoulder pad. This Sociometer was designed with ergonomics in mind and intended to be specifically made for social data gathering tools. There are less informations on its specifications. However, it is shown to have at least microphone, low powered IR transceiver to detect only nearby face to face conversation, and accelerometer to detect body language. It is also known to be modular, as it can be attached with other sensors like gyroscope.

nTag.

nTag is a commercial badge made to manage a lot of people in a conference. Its features are, for example, to conduct real - time voting for any participants within the conference, logistics, as well as information sharing between the event organizer and its wearer. It has a local positioning system with RFID and has a display to fit small sentence. Since, it is mainly to be used in a conference, I assume, there is an administrator control panel somewhere to dispatch the questionnaire or survey.

Sociometric Badge.

Sociometric Badge is the main inspiration of this project. Its first iteration came in 2007 with features like microphone, IR transceiver, Bluetooth for data gathering, RF transceiver for local positioning system, as well as accelerometer. Software wise, it has a real - time phone application, and a server to store data. However, what kind of functionalities the server provides is not known.

The current iteration of Sociometric Badge comes from the company, Humanyze. It has better form factor as well as, it is shown in their website, client and administrator control panel. However, the connection between each badge and where data can be stored still need to be done manually.

Rhythm Open Badge.

Rhythm Open Badge is the current open solution to the Sociometric Badge. It has two iterations, the first one is using RFDuino where as the latest one is using nRF51 development kit. The latest version is using low powered Bluetooth and there are no documentations on other features aside it has microphone, a server made using Python, and Android application for proof of concept.