Usability

User Research:
We have conducted a user research to be able to understand what user needs from our product and then we have shaped our solution accordingly to the user needs.Our target audience was the smart phone and pc users. During the interviews we have asked them their frustrations on the conference calling applications and bluetooth headsets. They said that when they are talking to more than one person, they struggle to follow the conversations,especially if two people are talking at once. When we were interviewing few businessmen and businesswomen; they have told that they would like to have directional hearing in conference calls. Most of the users did not use the bluetooth headset because they thought it looked weird. They said it was outdated in the current decade.They have told us that they would not mind using something more fashionable.

User needs:

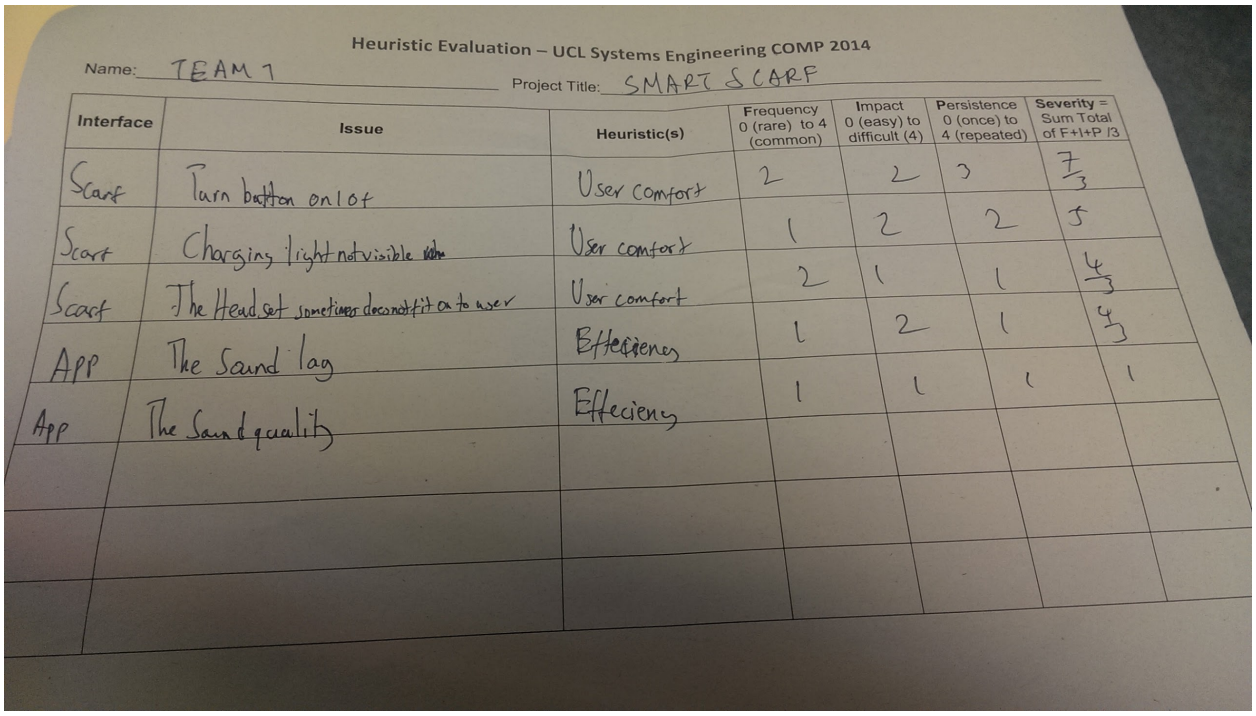
- A modern day headset and being headphones free
- A directional voice conferencing call applications that could be used in all major mobile and computer applications.
- The application should be simple to use

User testing:
After successfully build the Smart Scarf headset we gave to few users who were mostly our friends for some feedback in order to improve our design. They told us that the user interface of the scarf was not straightforward but the quality of the sound received was impressive. They have also told us that the scarf felt comfortable to wear.

We have have also tested our conference call application with the same group of people. They were really happy about the user interface.They have found it quite simple to use and told us that it was self explanatory. As well as this, they have told us that the 3D real time converstaion is really good and they could listen to multiple people with ease at the same time.

Iterative design process
We started as a hardware project and our initial aim was to create a modern day headset with binaural sound capabilities. After conducting user research we have decided to use bone conduction technology. The reason was that user safety(You can hear your surroundings). As well as the sound quality of the bone conduction speakers are higher quality compared to loudspeakers or to the conventional headphones.At the same time it will look better as no wires will be coming out from the scarf. After facing hardware difficulties we had to iterate our idea once again. We have decided to create an application that goes with the smart scarf headset and allows user to have Real time conference calls in 3D space.

Heuristic Evaluation



Heuristic Evaluation – UCL Systems Engineering COMP 2014

Name: TEAM 7 Project Title: SMART SCARF

Interface	Issue	Heuristic(s)	Frequency 0 (rare) to 4 (common)	Impact 0 (easy) to difficult (4)	Persistence 0 (once) to 4 (repeated)	Severity = Sum Total of F+I+P /3
Scarf	Turn button on/of	User comfort	2	2	3	7/3
Scarf	Charging light not visible	User comfort	1	2	2	5
Scarf	The Headset sometimes does not fit on to user	User comfort	2	1	1	4/3
App	The Sound lag	Effeciency	1	2	1	4/3
App	The Sound quality	Effeciency	1	1	1	1