Meeting Agenda (Week 6)

1st April 2019, 1PM – 2PM

Attendance:

Members	Attendance
Ben Li	Yes
Jiawei	Yes
Jireh	Yes
Jordan He	Yes
Jose	Yes
Link Geng	No
Minh Doan	Yes
Frederick Chew (Client)	Yes

Main objectives:

1. Discuss which camera to buy, and place order for camera
2. Clarify mode of communication with client when he is overseas

Points of discussion:

Choosing which camera to buy

The team will go ahead with the 180 degree camera

- Can be easily replaced with 220 degree camera for future teams to build on this prototype
- Client will proceed to buy 180 degree camera
- Since client will be overseas from 6th April – 6th May, he will order and have it delivered to his office for us to pick up.
- Due to camera costing $121, we will have to watch the current budget from this point

Demonstration of current device

The current device detects sound direction using the respeaker mic array, while utilising two 180 degree cameras which will switch depending on sound detected. The function of the device was demonstrated to the client.

The current issue with sound arrival was discussed; if there is a very small sound it will generate a random direction (which is why it can switch when no one is speaking). We can prevent this by thresholding the magnitude of sound to improve accuracy, while this can also potentially cut out any irrelevant background noise/error.

Client concern: he acknowledges the switch, but wants to reduce the sensitivity
Solution: having a delay when someone speaks (about 0.5 second) before the camera switching in order to determine whether a person will continue to speak, or if it is just a background noise. Client is quite satisfied with the result, although he is slightly concerned with frame rate and lag which would affect the meeting.

Communication with client when he is overseas

Communicate progress through email and weekly updates in repository.

Critical decision made

Have to search for another ELP OV 2710 (180 degree) camera being sold within Australia, due to the current choice being estimated to arrive latest at the 7th of May. This would be too late for testing and prototyping stage.

Through the points discussed in the meeting, through the client's approval the team has decided to go ahead with ordering the ELP OV 2710 camera. This will cost $121 from Ebay, expected arrival date within 3-4 days from purchase date (therefore by the end of the week). Camera testing is to be conducted once the camera arrives.

Furthermore, the client has noticed that the conceptual design shows the camera lying down, when it may need to be upright in order to capture audio properly. We will have to revise the conceptual drawing of the device based on this feedback, perhaps increasing the base width of the design so the microphone will sit upright and next to the microprocessor rather than on top. New estimated height of device should be approximately 10cm.