

Meeting Log (week 5)

29th March 2019 12 PM – 2 PM

Attendance:

Member	Attendance
Ben Li	No
Jiawei	Yes
Jireh	Yes
Jordan He	Yes
Jose	Yes
Link Geng	Yes
Minh Doan	No

Tasks review (from last meeting):

1. Respeaker Mic Array has arrived last Wednesday - sound team has begun testing for sound direction of arrival
2. Further USB camera testing has been conducted in preparation for a demonstration for the Client meeting next monday
3. Documentation team is working on a Formal Decision Making log in the repository

Main objectives:

1. Analysis of feedback from Audit 1
2. Discuss project problems encountered since last meeting
3. Sound team demonstration of Respeaker Mic Array
4. Changing goals and milestones based on new design

Key points of discussion:

Feedback discussion

The team collectively looked through the feedback provided by the shadows and tutors in Audit 1, noting down the key constructive criticisms. Response and action items were formulated by the team and documented with respect to the feedback. This file (Audit_1_Feedback_Reflection) may be located in the Feedback & Reflection folder of the repository).

Testing results

The sound team has shown that the Respeaker Mic array is functional in detecting the direction of arrival of sound. This was demonstrated through the raspberry pi and sound array, which displays the direction the sound is coming from through displaying a number between 0-360 degrees in relation to where the sound is coming from. However, the array appears to detect background noise easily, which may be problematic if it is to be used in conjunction with a camera for image switching (high sensitivity to sound may cause undesirable image switching). A threshold for a certain noise level may therefore be implemented to prevent this.

Preparation for Audit 2 presentation

Admin

- Clear allocation of workload for each sub-team with resources and time estimates
- Updating the timeline and milestones based on the new approaches

Image

- Conceptual drawings for three designs
- Reasoning for choosing the fish eye camera
- Progress for previous approaches

Sound

- DoA testing and results (include video demonstration)
- Explanation of DoA algorithm
- Future work (ie. noise cancellation)

I/O

- New dilemmas relating to the output limitation

Critical decision made:

Anonymous reviews from the audit provided some good points of possible improvement for the group. A list of action items (as aforementioned) were produced to be follow up by the team where possible and response were given where not applicable.

Task delegation:

Sub-team	Team members	Task
Sound (direction of arrival)	John, Jose	Research on implementing noise threshold to prevent undesirable image switching. Prepare demonstration video for Audit 2
I/O (file conversion)	Link, Jordan, Ben	Prepare demonstration of existing device for next client meeting

Image (processing)	Link, Jordan, Ben	Prepare demonstration of existing device for next client meeting
Assembly (modelling/manufacturing)	Minh, Jireh	Prepare new conceptual design drawing for Audit 2
Documentation	Minh, Jireh	Update the repository Decision making log and other supporting documents based on Audit 1 feedback

Note: all tasks outlined in “Preparation for Audit 2 Presentation” must also be completed by the respective sub-team.