Meeting Agenda (Week 8)

3rd May 2019, 1PM – 2PM

Attendance:

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

Task review:

1. Sound team – focus on improving further sound cancellation from the laptop PC speaker to avoid feedback

The sound team has been testing the possibility of an open source voice recognition code. This code is designed to capture only the sound of human voice, therefore it can ignore any unnecessary background noise.
Presently, the team must decide whether to utilise this code or the previously existing one.

2. Image team – Focus on image processing including the combination of face-detection and de-warping

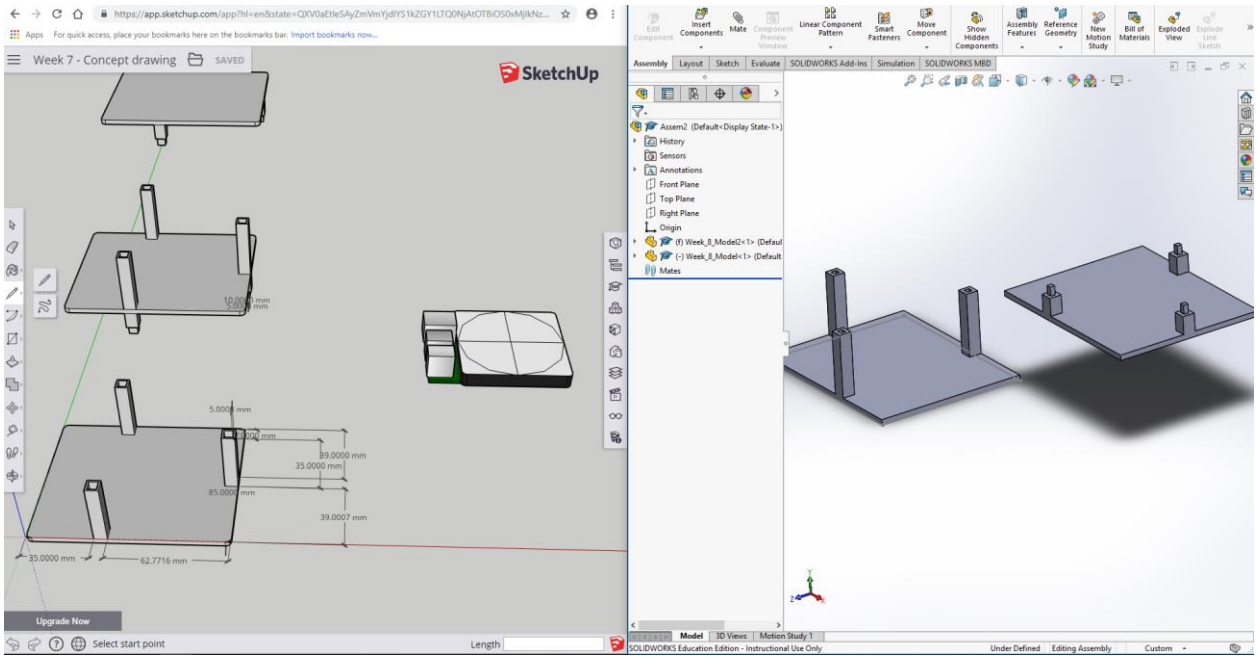
The face detection algorithm was found to have some latency in processing the video, this is due to the lack of a GPU on the Raspberry Pi, and all computation are completed on the CPU. The current plan is to detect the face using the initial output of the fisheye camera before the video is de-warp. To reduce the latency, the team will reduce the sampling rate for facial detection, the function will only be call once every ten seconds.

Further research is being conducted into I/O of the system.

3. Assembly team - Update 3D model for prototype device

As mentioned in the last meeting log, the design of the device was revised to be more modular. The modularity will allow additional components to be added or removed as required in the future. This week, the Assembly team translated the initial concept designs from Google sketchup on to Solidworks so that the device casing can be 3D printed as soon as possible for testing.

At this point, the team is considering the possibility to utilise two layers (shown right) instead of three (shown left) due to the discovery that the 4-Mic Array can be used as an active recording device.



Main objectives:

1. Look through assessment guide as a group
2. Plan changes to repository based on the assessment guide
3. Figure out final deliverable

Points of discussion:

Look through assessment guide as a group

Planning changes to repository based on the assessment guide (what still needs to be done)

Progress indicators	Criteria	What needs to be done
Project outputs (baseline)	Tested by team and other internal stakeholders	- produce fully functional 360 degree web cam by mid-wk. 10 - requires video evidence of testing - feedbacks completed for user satisfaction
	Benchmarked outputs against requirements	- preliminary benchmarking (for each subteam) has been conducted. Final device with combined parts must be compared with initial requirements
	Technically rigorous solutions	- proof through meeting minutes and decision logs (shows our thought processes for each step/solution)
Project outputs (acceptable)	Outputs endorsed by client	- produce a document (including handover document/user manual) for client to sign
	Prototypes	- Combining all sub-team components to produce device
	User testing	- tested by team and other internal stakeholders; potentially tested by client and colleagues
	Design validated against requirements	- validation of output can be completed through scoring how well the system meets the requirements, and the feedbacks received from client.
Decision making (baseline)	Transparent communication? – ask tutor	- evidence of communication

	about this next tutorial	through messenger
	Centralised communication?	
Decision making (acceptable)	Broad stakeholder engagement	- evidence of engagement with client
	System version control	- shown through history of markdown document showing what is updated and when
	Alignment with ISO standards? - which ISO exactly?	
	Pro-active engagement with externals	
	Invoking model-based systems engineering (MBSE) to manage projects	
Teamwork (baseline)	Complete	
Teamwork (acceptable)	Engagement with mentors	- consult supervisor/professors and provide evidence (documentation) – Ben, Jordan in particular
	Embracing diverse skill-sets	- people from different sub-teams learning and working in different sub-teams; show-evidence - showing evidence for taking into consideration other sub-team opinions eg. John worked on concept design in week 2/3 and solidworks design
	Building opportunities for personal development	- screen-capture of relevant online messages (also put in decision-making/communication part) - eg. when deciding how many cameras, what quality - deciding on functionality of fish-eye camera vs. four camera system

		- planning meeting agendas before meetings - discussing progress for each component and their function
	Embracing lessons from failure	- four-camera system
	Reducing uncertainty	- eg. switching to fish-eye lens from four-camera system to reduce uncertainties - deciding to not use USB mic because of discovery of 4-mic array capable of capturing sound
	Building support teams around the project?	
Communication (baseline)	Using a systems vocabulary	- project is open source; needs to be understood in terms by external viewers
Communication (acceptable)	Facilitated communication between team and stakeholders	- weekly meetings with the client
	Strategic communication to stakeholders	- weekly meetings with the client, tracking progress updates through repository documentation and email
	Modelling of professional communication	- visible through meeting minutes
	Active listening	- evidence that members have no bias and consider all members' opinion as equal
Communication (exemplary)	Building a shared vision	- project tasks, timeline agreed with client
Reflection (acceptable)	Establishing external benchmarking processes	- completed with feedback process from audit - feedback from tutor
	Deliberate seeking of mentoring?	- Ben, Jordan to speak with supervisor(s) again

Task delegation

Sub-team	Team members	Task
Sound	John, Jose	Live sound capture
I/O	Link, Jordan, Ben	Figure out software for one source output
Image	Link, Jordan, Ben	Combine de-warping and facial detection
Assembly	Minh, Jireh	3D print casing
Documentation	Min, Jireh	Continue documentation