

Meeting Minutes

Date: 3 May 2019

Location: Cognitive Lab, Galileo, IBM Hursley

Present:

IBM	Jon McNamara, Louise Cooper, Emily Larkin
Project Group	Joshua Rizal Chan, Lua Ying Hao, Ng Yi Song, Patrick John Chia, Joel Yeow

Agenda

1. To meet and get to know IBM team
2. To discuss concerns brought up in internal group meeting on 2 May 19
3. To clarify details of project -- implementation requirements, hardware provision by IBM

Minutes

Item	Action By
<p>1. <u>Introduction by IBM Team.</u> IBM team -- Louise, Jon and Emily, welcomed our group at IBM Hursley, and provided an introduction to the project.</p> <ul style="list-style-type: none">• Louise presented on project requirements• IBM team clarified their own roles with reference to the project• IBM team provided tour of IBM Hursley	None
<p>2. <u>Administrative -- Communication.</u> Settled methods of communication.</p> <ul style="list-style-type: none">• All members of group set up Trello accounts to keep track of progress of project and action items• All members of group set up Slack accounts for easy communication with IBM team• Method of video conference discussed and confirmed.	None
<p>3. <u>Administrative -- Updates.</u> Settled frequency and method of updates.</p> <ul style="list-style-type: none">• Video conference every Friday afternoon at 2pm to keep IBM team updated on progress• To provide a blog post on progress every week	None
<p>4. <u>Makaton Sign Language.</u> Louise clarified that sign language to be used is Makaton, a language programme meant for use by people with learning disabilities. Discussed extent and method of implementation.</p> <ul style="list-style-type: none">• To start with 5 signs first• To check for Makaton tutorial videos online• To identify 5 signs to implement, ensuring that signs are	Ng Yi Song

<p>differentiable from each other, and choosing signs that are common in everyday use</p> <ul style="list-style-type: none"> • Possibly increase number of signs after first five signs can be interpreted with high accuracy, time permitting 	
<p>5. Data Collection. Discussed possible considerations in data collection for Makaton dataset.</p> <ul style="list-style-type: none"> • Signers -- group members, possibly require volunteers • Different angles -- of camera and signer • Different lighting • Data augmentation -- to artificially boost size of dataset • To start recording videos to produce dataset 	<p>Joshua Chan, Ng Yi Song, Joel Yeow</p>
<p>6. Online Materials. IBM team outlined resources available to project group online, and how they might be used in this project.</p> <ul style="list-style-type: none"> • IBM Cloud catalog -- for using IBM Cloud • Tutorials for Watson text to speech • Node RED platform for prototype assembly -- tutorials available on Trello board, can liaise with IBM for additional help on platform • To examine/use online materials where relevant 	<p>All</p>
<p>7. Materials. IBM provided the following materials.</p> <ul style="list-style-type: none"> • Raspberry Pi • Webcam • Stuffed elephant • Miscellaneous hardware from previous project including microphone and speakers -- to check what is salvageable 	<p>None</p>
<p>8. Materials to arrive. IBM will provide the following materials within the next week.</p> <ul style="list-style-type: none"> • Nvidia Jetson Nano • Pi Camera 	<p>None</p>
<p>9. Materials to be purchased. To purchase switches for interface.</p>	<p>Joshua Chan</p>
<p>10. Data Analysis.</p> <ul style="list-style-type: none"> • To get medical professional to analyse the data • Low priority for implementation 	<p>None</p>
<p>11. Machine Learning -- IBM. IBM could provide servers for machine learning training, but need more time to check on feasibility.</p>	<p>None</p>
<p>12. Machine Learning. Project group to start examining possible architecture implementations for sign language detection.</p>	<p>Lua Ying Hao, Patrick John Chia</p>

Action Items

S/N	Para	Action	Party	Deadline
1.	4	To check for Makaton tutorial videos online, and identify 5 signs to implement	Ng Yi Song	6 May 19
2.	5	To start recording videos to produce dataset	Joshua Chan, Ng Yi Song, Joel Yeow	-
3.	6	To examine/use online materials where relevant	All	-
4.	9	To purchase switches for interface	Joshua Chan	9 May 19
5.	12	To start examining possible architecture implementations for sign language detection	Lua Ying Hao, Patrick John Chia	-