

Progress log 6: 04/03/19 – 10/03/19

Task number	Task name	Begin Date	Due date	Time spent	Completed ?	Comments
1	User testing	04/03/19	10/03/19	50 hours	Yes	Not enough data. Must continue with this task next week
2	Software testing	06/03/19	10/03/19	12 hours	Yes	Not enough data. Must continue with this task next week
3	Improve on the TensorFlow model by adding more words for recognition	07/03/19	09/03/19	5 hours	Yes	I have further improved my model from last week in recognising more words, but the accuracy can still improve(e.g. ~89%) if we train it for longer
				67 hours	0 tasks remaining	

Purpose of tasks

For the sixth week of my project, I started with user testing and software testing. For user testing, I aim to test the app with 210 random participants in the university or outside. So far, I have tested with 100 participants so will have to continue with this task next week. For user testing, I am getting people to test the app so I can gain data. For example, the participants I've tested with so far have experimented with the background speech recognizer in different scenarios (e.g. phone under the chair, blocked by a thick object etc.) For software testing, I aim to detect defects within my code and test the functionality/non-functionality of the app. I am currently doing this via functional, non-functional, dynamic and static testing.

Discussion with supervisor

In this week's discussion, I showed my supervisor another demo of the functioning app. I received positive feedback and some tips to enhance it. For example, he stated that I should stop the voice recognition background service from running when it doesn't detect any voices i.e. only activate when it hears a keyword (e.g. 'ok Google' etc.). This is so it can save the users battery power. Below are a few tasks we agreed on in which I can complete by next week.

- Continue with user testing and consider adding more interesting experiments that can output relevant/useful data (e.g. testing the background speech recognizer from specific distances 2 metres, 3 metres, 4 metres....)
- Continue with software testing
- Continue training the TensorFlow model, so its detection rate is at a high level