Review Score: Yellow

Introduction Comments: I think it is better to start with the research question instead of dataset. It is very unclear to me about how the dataset is related to research questions mentioned in the end- finding features (specifically Affect and Emotion) related to learnings. It would be beneficial if Al can start the presentation with research question, why you are doing it, how you are going to do, what you have done so far, what you have found out, etc.

Dataset: Al has spent most of time talking about the dataset Al collected and how it had collected them, what kind of files and methods have applied. It seems obvious to me that one of the biggest problems is that the dataset is only obtained from Al’s brain. Each brain is unique, and they are different in learning. Al’s brainwaves are not persuasive enough. The current dataset length is 40 minutes. I think it is plausible for Al to spend a few hours to collect more brains’ signals. It’s great Al has made some progress in collecting and processing the signals. It is important to present the distribution and line graphs of electrons fluctuation. What’s more important is that Al needs to analyze these distributions and line graphs. You just showed these distributions without any explanation about what you have found out from there. I am glad you have mentioned the distribution of F4 and F8 line graphs are very similar after visualizing them. Again, it is necessary to let us know why F4 and F8 are similar and what do you expect to get into it. I saw the line graphs are only one-second signals, I am not sure about how Al processed the “Affect”. Will it be beneficial if the signals can be analyzed using longer timeline instead of only 1 second? Perhaps, Al could find more interesting turning points when using longer timeline.

Method/Models: I think this is a big missing part in Al’s presentation. Al needs to think about how to measure and detect Affect will be associated with learning. Al has mentioned clustering and adding classifiers. But how to do it is missing. Perhaps, you may need to try different cluster methods and give us more details about the LDA. It is essential to think about how to tag the cut-off point of emotional variables, such as frustration and how to cluster these variables. It is unclear for me what you could expect from the cluster results and how you will implement this. It’s better you can work more on this.

Next step: It is clear to me about what Al is going to do next. I would suggest that Al can work not only on his signal framework processing, but also his theoretical structure and empirical model.

Overall, Al has made great process in collecting the sample data from his brain, which is the difficult part. Going forward, I would suggest 1) record more than just Al’s brain. This project needs a larger sample to convince people; 2) Perhaps as Yoav suggested in the class, why not work more on the targeted experiments to detect the P300 waves; 3) When Al analyzes the signal, perhaps he can use longer timeline to detect your features. Al needs to let us know what could you possibly tell from the analysis.