How will the engineering team program the speaker without the help of single board computer?

No, that is still the same I didn’t show the details in here. EE group uses single board computer to receive signals. EE students don’t do anything extra here, they scan for signals and play the sound as proposed earlier.

Can you please clarify what did you mean by BLE signals from server? Servers mainly deal with data, not BLE signal.

BLE signal is actually sent from the users’ cellphone. ‘But when it is done’ that calculation is done by the server (or you can use app to do this calculation). Conditions: when user is within 5m range of the bus stop and bus is 200m away from the stop. Only disabled person’s cellphone.

As per discussion with Reza, the engineering with the Engineering team will deal with single board computer programming. Please note that it will be too much workload for the COSC team to create another app to track the bus location. We could use the same user app to track the bus location, but it will require major changes on our database side and will make the project more complex. Even if we do it, how will the engineering team will program the light sensor system without single board computer? Based on our initial architecture, we were planning to get the bus location from location engine.

Just to clarify, light sensor system is still the same (nothing has changed as proposed earlier.) Could you explain, how you plan to track the bus? Location engine?.......If this will add more work for COSC students, I would suggest EE students to add a GPS tracking board to light sensor system plus an LTE module for internet. (Fremtid media will provide additional Micro/Nano SIM with enough data to sync data with server). COMS students can program these two additional boards to send the collected information to their server and rest remains the same.

Beacons can only send their IDs and location data. How can it tell the light sensor to work?

A notification is sent to the cellphone users when they are on the bus. (Decrease the range of this beacon so that the users outside of the bus don’t get this notification.) Now this notification/signal is forwarded to the server from the user’s app and then sent to light sensor system. This only happen for disable person, regular users only get the message “You are onboard”.