Hello Sir,

So far, a good amount of progress has been made on out project by Kogul and Sam in the software category and by me in the hardware category.

**Current Progress**

We recently changed our project to a telemetry system for a Mini Baja racing vehicle from our original idea, the “SenzRoom” room monitoring/sensing device. Even though this seems like a big change, the transition has not been very difficult. Most of the code we already have will work for the newly designed app. As per the PCB, I had to come up with a different design but I had not yet created the original design.

**Hardware**

Since the project change, I have designed a PCB to plug into the GPIO pins on the Raspberry Pi which allows for wires to be plugged into it from the sensors spread around the vehicle. This portion still needs a bit more work before it is finished. I have not yet added the power management circuitry to power the Pi from the vehicle’s 12V battery but I may have found a relatively cheap step-down converter on Adafruit to do this for me. Lastly, the new case still needs to be designed.

**Problems**

One problem that Kogul encountered was that we had to change a big part of the android application due to the fact that we do not need to intake multiple sets of data anymore. This was solved by creating a new app and importing the code from the old app with a new activity structure. Another problem that has been noted but not addressed as of yet is the casing for the Raspberry Pi. Currently we are using a plastic, laser cut case which would not stand in a rough, Baja environment. Thus, I have to learn how to design and 3D print a rugged case for the Raspberry Pi and each of the sensors.

**Financials**

So far financially, two more hardware components have been noted but not yet purchased. These are, the 12v to 5v step down converter and wiring from the Raspberry Pi to each of the 3 sensors.

If you have any questions or concerns, feel free to contact me or my colleagues via email,

Thanks, and Regards,

Kyele Haynes

Team Diversity