Individual Status Report I

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Section: 9 AM

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1. What are the top 3 things that you have learned in this course so far this semester? (*Minimum 2 sentences each*)

    1. I have learned about standard communication protocols between IC chips. This information was necessary to know due to the requirements of the project, which entail communicating between IC chips.

    2. I have learned about the MPLABx IDE and the MCC plugin. This information will be useful as the MCC environment automatically sets the registers needed to run the onboard peripherals.

    3. I have learned about the circuitry needed to drive a speaker. One of the subsystems on our project requires a speaker. Initially, the way we wanted to build the circuit to drive the speaker was incorrectly wired as a buzzer.

2. Describe your individual subsystem. What is the scope of your individual subsystem? What do you need to know in order to complete it? What do you still need to learn in order to complete it? (*Minimum 8 sentences*)

For my individual subsystem, I will be responsible for the Wi-Fi interface of the microcontroller. I will also be expected to communicate with another team's device using the Wi-Fi interface. Consequently, to perform this task, I will need to know and learn how to program the Particle Argon. Moreover, programming the Argon will entail learning about the online IDE. Also, I will need to know the pin layout of the Argon Particle. Knowledge of the pin layout will be necessary in order to set up the communication protocol required to communicate with the microcontroller. The communication protocol that I will be using is UART. Currently, I am not sure how the Particle Argon communicates through UART, so I will need to learn the procedures to establish the communication protocol.

3. In addition to your individual subsystem, how have you individually been contributing to your team's project up to this point in the semester? (*Minimum 6 sentences*)

In addition to the individual subsystem, I have contributed to the team project by generating ideas for the team to implement. In the beginning, we were pitching ideas back and forth; we debated the feasibility and practicality of the plans. In the end, we used one of my ideas. This is not to say ideas generated by my team members were unpractical or infeasible. I also contributed to the project by helping to test the initial speaker circuit we came up with. In testing, we found the speaker worked; however, when we consulted Dr. Jordan about the use of the circuit, we were told that we created a buzzer as opposed to a speaker. Moreover, I contributed to the creation of the block diagram and the component selection and the power budget.

4. On a scale of 1 (low) to 10 (high), how confident are you that your team will successfully complete a functioning project that meets all of the project specifications? Write a minimum of 3 sentences describing the rationale for your stated confidence level. (*Minimum 3 sentences*)

On a scale of 1 to 10 as to how confident I am about the successful completion of our project, I would say I am at a 9 at the moment. What leads me to have high confidence is that team assignments to this point have been done on time, and there have been no hiccups. Everyone seems eager to do their parts for the project well ahead of time.