Weeks 5 - 6 Status Report

**Name:** Jacob Knaup

**Section:** 9 AM

**Date:** 9/29/17

1. How could you further strengthen your team’s arguments for choosing components in the Major Component Selection Rationale assignments? Provide specific examples.   
*(45 points)*

I could further strengthen our arguments by choosing a wider variety of components to compare. Some of our component comparisons (for example the operational amplifiers that I compared) were very similar, and as a result, it was difficult to find different pros and cons for the two components. If I had compared two components that were less similar, the best choice would have been clearer.

2. What did you find the most challenging when creating a schematic for Homework 3, and how did you overcome those challenges? Provide specific examples. *(45 points)*

The most challenging part of creating the schematic for me was just getting started with Cadence. Going through the initialization tutorial and figuring out that I needed to use the ASU VPN for the license to work probably took the most time out of the assignment. I also found it very frustrating to keep the schematic organized. Every time I needed to move a component around, the wires would get crossed and the connections would break.

3. What obstacles did your team encounter over the past 2 weeks, and how did you individually contribute to their resolution? Provide specific examples. *(45 points)*

One obstacle that our team faced was deciding how our user interaction would work. Specifically, we were not sure how we would enable the user to turn off our pillow’s alarm. I contributed to its solution by suggesting that we program the PSoC to turn off the alarm based on feedback from our pressure sensors. Another obstacle was completing our Gantt chart. I contributed to its completion by completing weeks five through eight of our Gantt chart.

4. How will you individually contribute to the project in the next 2 weeks? *(45 points)*

I will contribute to the project in the next two weeks by completing the PCB layout for my subsystem. I will also write code for the PSoC to read or flex sensors. Finally, I will test my sensor PCB, making sure that the sensors are able to measure deflection and that the output is able to be read by the PSoC.