Motor Control Progress Report #9

Skittle Sorter Project

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Problem:

- The completed PCB design had not been reviewed and sent off for manufacturing
- No progress with implementing ReadTheDocs had been made
- System timing uses busy wait loops and is not tied to any real time
- Wilson needed additional help getting caught up with code development

Research:

- Usage of the SysTick peripheral on the tm4c from the datasheet
- Implementation of ReadTheDocs with github
    - https://docs.readthedocs.io/en/stable/intro/getting-started-with-sphinx.html
- Sphinx
    - https://docs.readthedocs.io/en/stable/intro/getting-started-with-sphinx.html
    - https://www.sphinx-doc.org/en/master/
- reStructuredText
    - https://www.sphinx-doc.org/en/master/usage/restructuredtext/basics.html

Action:

- Sent PCB design to JCLPCB for manufacturing
- Implemented ReadTheDocs for a private repository as practice
- Modified sorter.c and stepper.c functions to use real times, by adopting existing code written by Amy Swanson
- A meeting was made with Wilson, in which we went over the stepper code implementation, and he was able to build the project with make

Value:

- Everything is done with the PCBs until they get delivered
- ReadTheDocs will allow us to create user friendly documentation of our code
- System timing is now predictable and precise