Name Alex Curtis

Goal for exercise – "Introduction to Simulation"
To get familiar with Simulink and Matlab and apply knowledge from 307.

What do you know about Simulink?	**List all resources and what specifically you used or learnt from that resource to complete the challenge exercises.**
I used it freqently in my EENG310 class that I took last semester. We mostly used it for analyzing signals, but I'm already very familiar with how to use it. Simulink has a lot of valuable applications and signals and simulation and control. It also has some very powerful tools built in that allow you to analyze diagrams you create. The best part is that it's relatively easy to use with an intuitive interface.	I didn't need any additional resources beyond the MATLAB and Simulink built-in documentation to complete this assignment. That being said, there are a few specific reference pages that I'd like to point out. Using MATLAB to find the transfer function of the motor: https://www.mathworks.com/help/slcontrol/ug/sllinearizer.getiotransfer.html https://www.mathworks.com/help/slcontrol/ug/sllinearizer.addpoint.html https://www.mathworks.com/help/slcontrol/ug/sllinearizer.html https://www.mathworks.com/help/simulink/slref/sim.html Using pidtune inside my live script: https://www.mathworks.com/help/control/ug/pid-controller-design-in-the-live-editor.html

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Compile a list of all documentation created. Provide file name and a short description of that file.

I created my entire assignment and one MATLAB live script instead of making individual scripts for each part of the assignment. Since my file is a live script and the publish function doesn't work with that file type, I had to screenshot my block diagrams so that they would appear in the finalized report. Once I added those to my live script, it was easy to export the whole thing as a PDF file, with all of my text formatted exactly the way I wanted it to be.

Provide an example of something that you would do differently or you could improve upon during the course of this exercise.

This assignment went much better than assignment one for a variety of reasons. I worked on it earlier and spent a lot of time working on it throughout our allotted time. I enjoy using MATLAB and Simulink, and I had a lot of fun working on this. I often found myself working on this assignment instead of assignments in different classes because I enjoyed it so much. If I could do something different, I would figure out a way to export my figures at a higher resolution in the final PDF.

On a scale of 1-5, what is your comfort level with Simulation after going through this exercise? (1 being least comfortable and 5 being most comfortable).

<div style="text-align: center;">

1   2   3   4   5

I love MATLAB and I'm so excited to keep using it!

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