Instructions for in-class Labs

There are two labs offered each semester. The goal is to build simple combinational and sequential circuits using a breadboard, IC chips, wires, a myDAQ device, and a laptop. The first lab is on mixed logic method, and the second on finite state machine.

Students will be provided with lab writeups and pre-lab assignments

1. **myDAQ**: All ECE students are required to purchase National Instruments myDAQ student data acquisition board, available at [http://www.studica.com/myDAQ](http://www.studica.com/myDAQ) (Just the hardware is enough. We will provide a free version of the software.) This device is being used in ECE 2020, ECE 2040, and ECE 3084. It will also be a useful device to have in the ECE Senior Design Class. So all EE and CmpE majors should purchase the device and plan to hang on to it. Note, if you purchase it online, you will be asked for a student verification. You can send them an electronic version of your current schedule.

   We do not require non-ECE students to purchase the device and will supply them with a loaner to be used in the TESSAL lab for regular assignments.

This is how the myDAQ would look like.
2. Parts kit: All students (both ECE and non-ECE) are required to purchase a parts kit. Below is the Sparkfun link and code for the ECE 2020. The links will be active on the Monday January 08, 2018. You will need to order the kits within the first 2 weeks of class. After that the links will not be active as of Tuesday morning January 23, 2018. This will ensure that the kits will be delivered quickly in time for the class. I recommend that you order the kits early in the first week because Sparkfun is located in Colorado. The students can also use a 5% discount code on the kits. It is EDUGaTechStudent18. I am not sure if it works on all of the kits since this is new updated code.

NOTE: Make sure to use the URL below and do not go the Sparkfun website and type in the kit #. Also please make sure to order the kits within the first 2 weeks of the Spring 2018 semester. Sparkfun will be shutting down the ordering website links on Tuesday morning January 23, 2018.

Sparkfun Link: https://www.sparkfun.com/products/13947?custom_code=GTECE2020S2018

"Enrollment Verification" can be done by taking a picture of their student ID and uploading it. Everyone should purchase his/her own new parts kits because some of the parts get burned out during the term (by being hooked up wrong) or lost since they are so small.