Systems and Industrial Engineering
University of Arizona

SIE 370

Lab Policy

NO FOOD OR DRINK IS ALLOWED IN THE LAB AT ANY TIME (UNIVERSITY RULES)

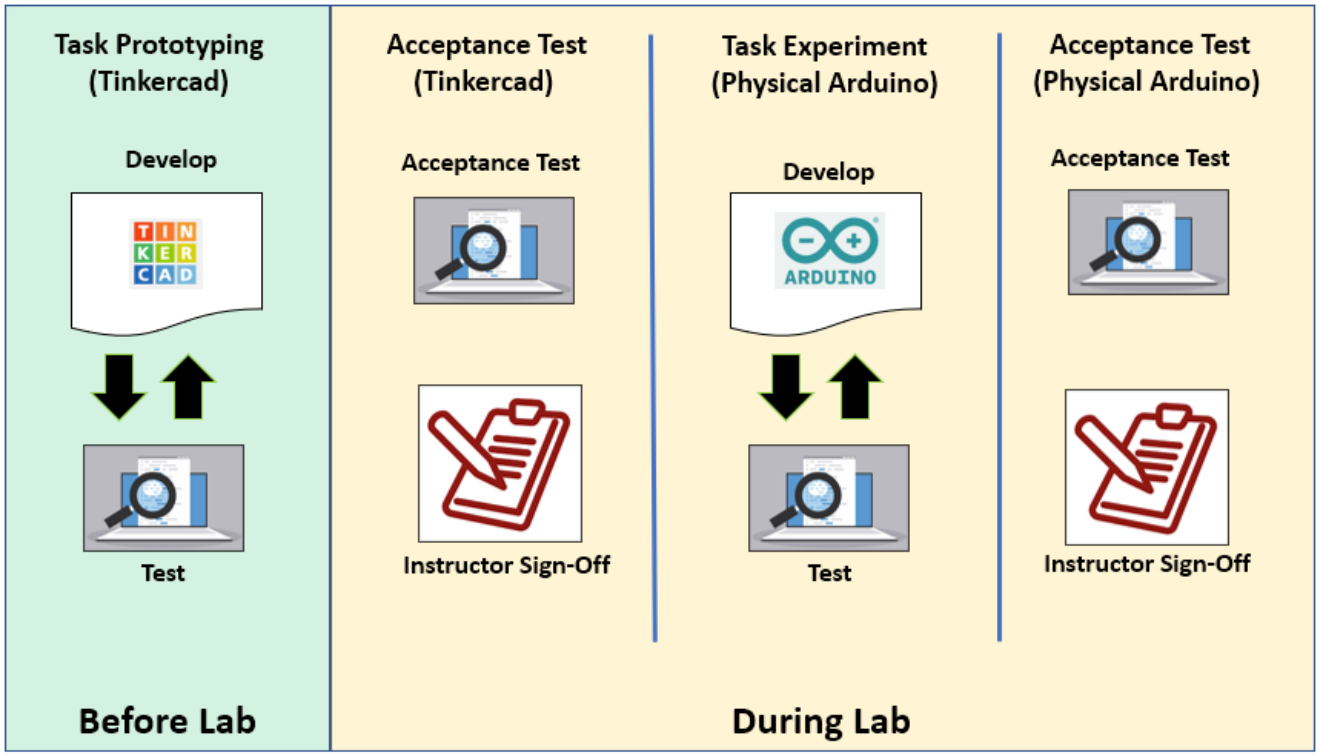

Figure 1 Our Lab Process from the Student Perspective

Task Prototyping

As shown above in Figure 1, before entering the Lab, you need to have already completed the work using Tinkercad. If the prototype passes the Acceptance Test, then you are ready. Your first step is to run the Acceptance Test on your Tinkercad Installation for the Lab Instructor and receive your Task Prototyping Sign-Off.

Task Experiment

As shown in Figure 1 above, after your Prototyping Sign-Off, you will wire your breadboard and components to begin the experiment using the Physical Arduino. You will work on your physical software and hardware solution to troubleshoot and fix any bugs or unanticipated issues. It is important to note that you will need to start with an empty breadboard and a completely dismantled project in the Lab, although you are highly encouraged to have already replicated this activity on your physical hardware / software solution before coming to Lab.

When you have the embedded system solution to the point where it also passes the Acceptance Test, then you will run it again for the Lab Instructor and receive your Task Experiment Sign-Off.

Attending Lab and Lab Area Cleanup

Bringing your laptop and Arduino kit and components is required for each student in the Lab. Each student is responsible for cleaning up their area after they have completed their final Lab Sign-Off and packed up their kits. Please, remember that you are being graded on your performance for this work as well as cleaning your space when finished.

Submitting Lab Reports and Software Solutions

Understanding your Lab before coming to Lab and being able to analyze and express your work during Lab are integral to your learning in this course.

Lab Report must be submitted after your Lab session. The Lab Report is due no later than the Sunday night @ 11:59 PM following your Lab session. The Lab Report is an integral component of your Lab experience and performance, and there may be a discounted grade for any late Lab Report.

There will be one D2L Assignment Folder per Lab where you will submit both your Lab Report and your Software Solution. All Software Solutions must be submitted in a plain ASCII text file. You will submit these assets to the corresponding Lab Folder.

The format for all filenames is shown below:

Lab Report:

SIE 370 LabX Lab Report LNameF.PDF

Where LNameF is your last name and first initial and X is the number of the Lab.

Example: SIE 370 Lab1 Lab Report KeatonS.PDF

Lab Software Solution Tinkercad:

SIE 370 LabX TaskPrototyping Software Solution LNameF.txt

If there is more than one task you may use the same file but separate them by a few lines.

Lab Software Solution Physical Arduino:

SIE 370 LabX TaskExperiment Software Solution LNameF.txt

If there is more than one task you may use the same file but separate them by a few lines.