

Lab 1

Week 4

EEL3701C: Digital Logic and Computer Systems



Prepared by: Omar Elbasri

Welcome back!

Everybody (I hope) survived Lab 0!

However, labs from now on will be conducted differently.

Moving forward, labs have two main components:

- Demonstration of pre-lab materials
- In-lab quiz

You will first do either a timed in-lab quiz or activity (most commonly a quiz) based on the concepts covered by the lab.

Afterwards, you will be directed by your PI about what parts of your pre-lab materials you will demonstrate functionality for.

If you don't have any questions or anything else to do in the lab, then you can leave! Otherwise, the rest of the lab will be office hours for any questions about content, homework, or the next lab.

For this lab quiz, you will take the following boolean algebra equation and simplify it with boolean algebra laws, **then create the circuit for the simplified equation in Logisim**. Draw the circuit on your paper before implementing it in Logisim.

Show **all work** sheet of paper and turn it in to the PI when they come around to check your work.

You will have **30 minutes**, good luck!

$$\left(A + \overline{(D + B)} \right) (\overline{B} + \overline{B}C)$$

DEMO TIME!

UF | Electrical & Computer Engineering
UNIVERSITY *of* FLORIDA