

CpE390L/CS 390L/CS391 Term Project

Please note that there will be no final exam for the lab this semester.

The Project

If you have no idea about your term projects, you could choose one of 3 topics. Possible topics are as follows:

1. Countdown Timer

Write a program using EVB that will take a two-digits input number from a PC keyboard and display numbers in countdown manner until the display number reaches to zero. (If the input digit is 10, the program will output 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0)

The result will be displayed on LED (Segmented Display).

2. Calculator

Write a program using EVB that simulates a one-digit calculator.

It should be able to calculate the Addition, Subtraction, Multiplication and Division of two one-digit inputs from the keyboard.

The result will be displayed on LED (Segmented Display).

3. Traffic Light Control

Write a program using EVB that implement different states representing traffic signals and how to control it. There will be different states indicated by Light Emitting Devices with colors red, green, and yellow. Each represents a different state.

Your term project report should include following contents:

1. Introduction of Project

Give a detail explanation of your project proposal

2. Circuit Diagram/s for Project

The diagram must be a detailed one, and must specify every component you intend to use for your project. You should attach any explanation and documentation you think would give the TA insight into understanding your approach.

3. Project code

You are required to build the circuit and run the code for your project. You will work on the project during the regular lab session time.

4. Findings/Results

Attach all your program results screen shots along with necessary comments, even picturing the hardware structure.

Students are encouraged to be very detailed and specific with the final project report.