

LAB 1 Report

Team Members: Conner Eckel and Adam Krug

Date: 9/13/2022

Note: please submit lab reports, short video, project on Canvas. A single .7z or .zip file named Lab1_Member1_Member2 should be submitted for each group. Either team member can submit online. Only one submission is needed. The TA will take care the grading for both members.

The whole project including codes and .uvprojx, should be a .7z or .zip that is included in the Lab1_Member1_Member2 file. In that way, TAs can simply open your project to test the results if needed. In addition, the lab report using the provided format is also included in the Lab1_Member1_Member2 file.

Late submission is not accepted.

Grading Rubrics (Total = 100 points) _____

1. Pre-lab assignment (10 points) _____
2. Documentation and Maintainability (25 points) _____
3. Functionality and Correctness (25 points) _____
4. Lab Demonstration (30 points) _____
5. Post-lab assignment (10 points) _____

LAB 1 Report

Team Members: Conner Eckel and Adam Krug

Date: 9/12/2022

Introduction

This lab serves as an introduction to using the C programming language to program an ARM Microcontroller, in particular, we program an onboard LED to flash at regular intervals.

Design

We attached the files for the program, along with a video of the board functioning, since I don't think our names were taken down when we completed the lab since we finished fairly early.

Functionality and Correctness

The LED blinks at an interval, it may not be exactly half a second because the delay function from lecture gave us issues so we used a loop to waste time instead. Otherwise, the project fully meets specs.

Lab Demonstration

https://drive.google.com/file/d/1H97Uj5VmMjB_NC_rtsgFWG36Wus_L4UN/view?usp=sharing

Pre and Post Lab

<https://drive.google.com/file/d/1NS6bxIDQHDx3ctelJ8TkrJ62jt1F2bVs/view?usp=sharing>

Conclusions

We were able to make the Green and Red LED blink. The main problem we struggled with for the lab was the delay function. At home when we were testing the code before the lab we could not get the delay function to work. We discussed this problem with our classmates and we decided to forgo the delay function and use a for loop to increment a volatile int and function as a delay function.