

SE101—Project

Rollen D’Souza, Patrick Lam, Mahesh Tripunitara

Fall 2016

Last Updated October 4, 2016

Introduction

In this lab you are given an opportunity to follow the full software development cycle and to be creative with the microcontroller board. This lab is flexible. However, your mark is proportional to both the difficulty of the project you attempt, as well as the performance of your execution. Please use both the microcontroller board as well as the Orbit Booster Pack. Keep in mind that you should be able to complete the project with minimal assistance.

Requirements

- In groups of 2 students, submit a proposal of the project you would like to complete. The document must:
 - Be a PDF.
 - Clearly state full name, ID number, and Quest/WATIAM ID for both students in the group.
 - Be at most 1 page long.
- The proposal document must describe the following:
 - Your project. What will it do?
 - The major software components of your project (e.g. implement LCD user interface, implement accelerometer data collection).
 - The hardware components you intend to use in the project.
 - The challenges you anticipate. For example: if you are using the LCD screen, you may anticipate the challenge of drawing and moving a complex object.
- You must *develop* and submit the project using `svn`. Marks will be deducted for not using source control effectively. That is, we expect to see at least two non-trivial commits. Trivial commits are those that consist of only changes to whitespace.

Important Dates

Proposal Due Date	October 24, 2016 @ 23:59
Proposal Feedback	October 27, 2016 @ 11:30
Project Demo Due Date	December 5, 2016 @ 11:30

Marking Scheme

Criteria		Mark Contribution
Execution	Project Proposal	10
	Low Difficulty	10
	Average Difficulty	10
	Above Average Difficulty	10
Style	Naming	2
	Whitespace Usage	2
	Easy to Modify	2
	Use of Control Flow and Types	2
	Use of Source Control	2
Total		50
Bonus		5

Submission

You must submit your assignment using the ECE SVN (subversion) repository. You are graded on your use of Subversion. We expect to see at least two non-trivial commits. Trivial commits are those that consist of only changes to whitespace.

Please see Piazza for more information on using SVN.

Please commit your solution to:

`https://ecesvn.uwaterloo.ca/courses/se101/2016/students/YOUR_WATID/project`

where you replace “YOUR_WATID” with your WatID (e.g. p23lam). Email Patrick Lam if you can’t commit to that address.

Tips

- The moment you have a working program, commit it! If things go wrong, you can always go back.
- Expect to stumble upon unexpected hurdles. Always give yourself an ample amount of time to finish the project!

References