

Team Members: Eric Wang (erw825), Jenna May (jtm4565), April Douglas (add3338), Matija Jankovic (mj27676)

1) Overview

Objectives: We are creating a wired keyboard that will be compatible with Windows computers.

- a) Roles and Responsibilities: The project work will be divided in the following manner:
 - i) Matija – PCB
 - ii) Eric – Enclosure
 - iii) Jenna – LCD mini-apps and other drivers
 - iv) April – USB and Bluetooth communication and MX Switch Matrix
- b) Interactions with Existing Systems: Our keyboard will be a functional wired keyboard for use with Windows computers.

2) Functional Description

- a) Functionality: Our system will act as a functioning USB keyboard. When a key on our keyboard is pressed, the computer it is connected to will type (display) the key. We will also attempt to implement Bluetooth functionality, such that the keyboard can also function wirelessly.
- b) Performance: We will judge that our keyboard has proper functionality if we are able to quickly and accurately type using the keyboard. Our keyboard will need to respond to keystrokes at 500 words per minute with near 100% accuracy.
- c) Usability: The keyboard will function as a normal keyboard. We will have letter keys, number keys, and caps, tab, shift, and control keys. Four letter keys will also have alternate functions as arrow keys. Essentially, we will be building a 60% size keyboard.

3) Deliverables

- a) Reports: The reports for Labs 7 and 11 will be written
- b) Outcomes: We will include the Lab 7 and Lab 11 deliverables

Rough/preliminary PCB schematic & layouts and bill of materials can be found in the group GitHub repository.