Yew Journ Chan

20391478

Interaction Design

Simple State Machine – Design Document

3/21/20

The assignment was for us to create a simple state machine which will allow us to turn on and off and LED after 4 consecutive clicks. Once the four clicks are done, the program should reset allowing the user to restart from the beginning and repeat the program.

In order for this program to work, it will start at the first state, which will not light up the LED. After four consecutive clicks, the LED will turn on and stay on until the button is clicked again, which will prompt the program to change it’s state. After the fourth click, the next click will then reset the program and restart the state back to state 1, allowing the user to repeat the process.

For the Interaction Design, I included a video file in the GitHub repo to demonstrate how the program works on the Adafruit breadboard.

Overall, I initially thought this would be a simple project as the logic behind getting the LED to flash during certain states seemed relatively straight forward. However, upon getting started and trying to verify and upload the code onto the Adafruit, I came across trouble as to why the LED would not light up despite the amount of states the button has switched. I had to play around with different troubleshooting problems and recheck all the hardware wiring to eventually get my board to reflect what my code intended for it to do.

In terms of where I stand with this class right now, I am able to figure out the code for the assignments but am still having trouble trying to figure out the hardware and wiring alone.