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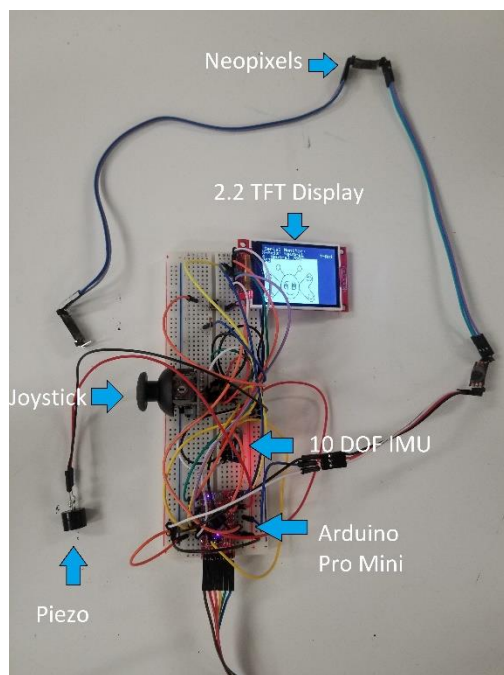
Zane Cochran

Advancing Prototyping

April 2, 2018

Function Proof of Concept

Functional Breadboard



Splash Screen	Main Menu	Play
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Stats	Help	About
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Getting the screen to work was more difficult than I anticipated and getting the library for the 10 DOF IMU took a considerable amount of time to find. Everything else was implemented more smoothly especially the joystick. The bitmap takes a massive amount of memory, so I was not able to put in different variations of Yilime. I ran into some problems with screen blinking throughout the menus. To make the screen appear static, I used if-else statements, so the program is not constantly drawing the menu repeatedly. I also programmed Yilime's health to go down whenever the user shakes the device violently.

HelloWorld Software

I have included the software in the GitHub repository with the following libraries:

- Adafruit_GFX
- Adafruit_ILI9340
- Adafruit_NeoPixel
- SPI
- Wire

PCB Design

