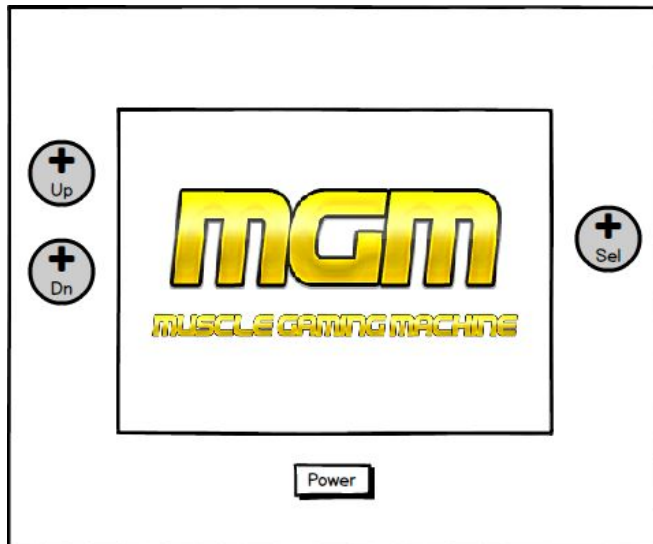


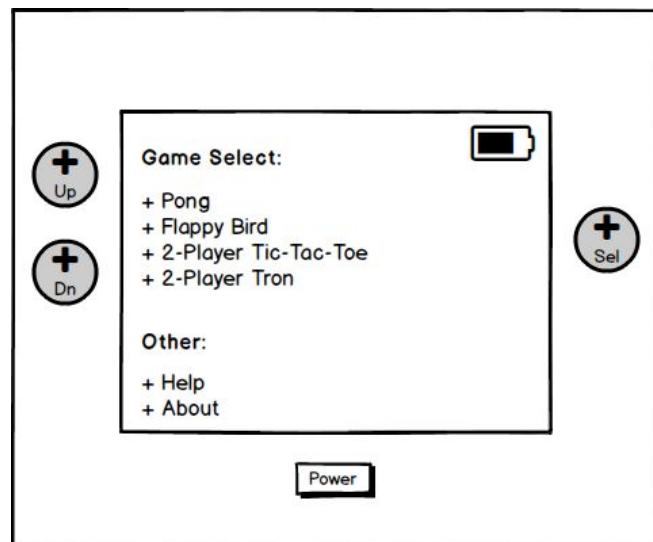
Function Proposal

Wireframe Storyboard



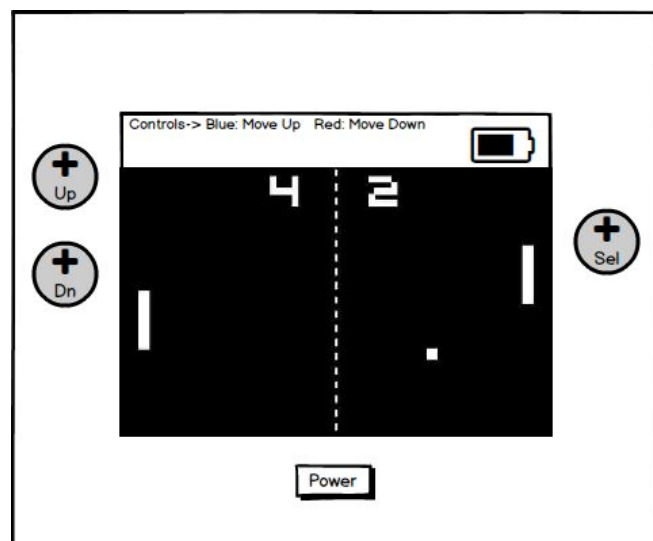
Splash Screen

The splash screen is the first thing that appears when the Muscle Gaming Machine is powered on. It lasts for 2 seconds then loads the main menu.



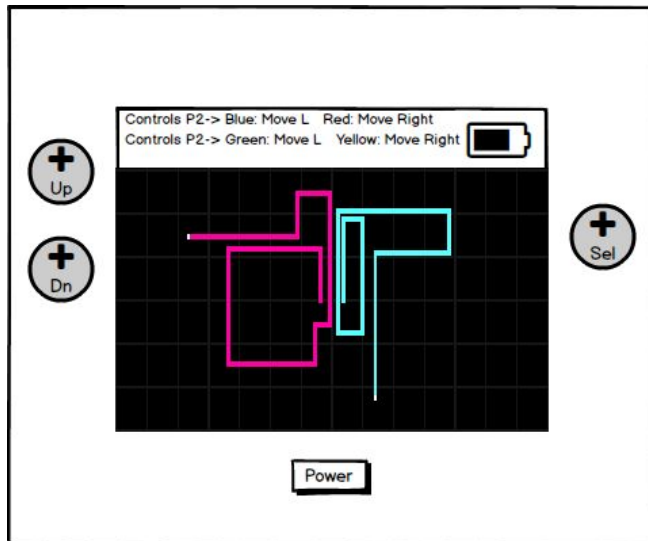
Main Menu

The Main Menu on the MGM shows 6 options in 2 categories. There will be one section for games and another section for help and about. The Up and Dn keys navigate the screen and the Sel key confirms the selection. There is also a battery meter in the top right section that appears when the battery is low.



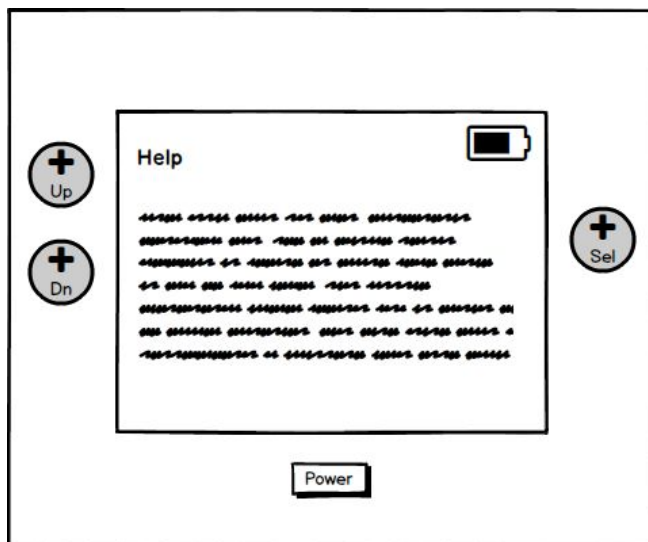
Pong Game

The Pong game is played by connecting the muscle sensors to the user. The muscles are then flexed according to the controls shown on the top of the screen. The muscle sensors will be color coordinated to assist in usability.



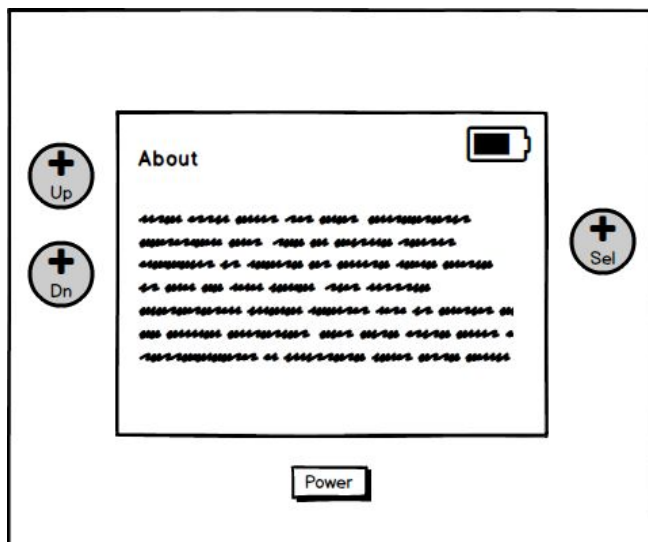
Tron Game

The Tron game is also played and controlled by connecting the muscle sensors to the user. The controls in the top of the screen show which sensor controls what for each of the users.



Help Screen

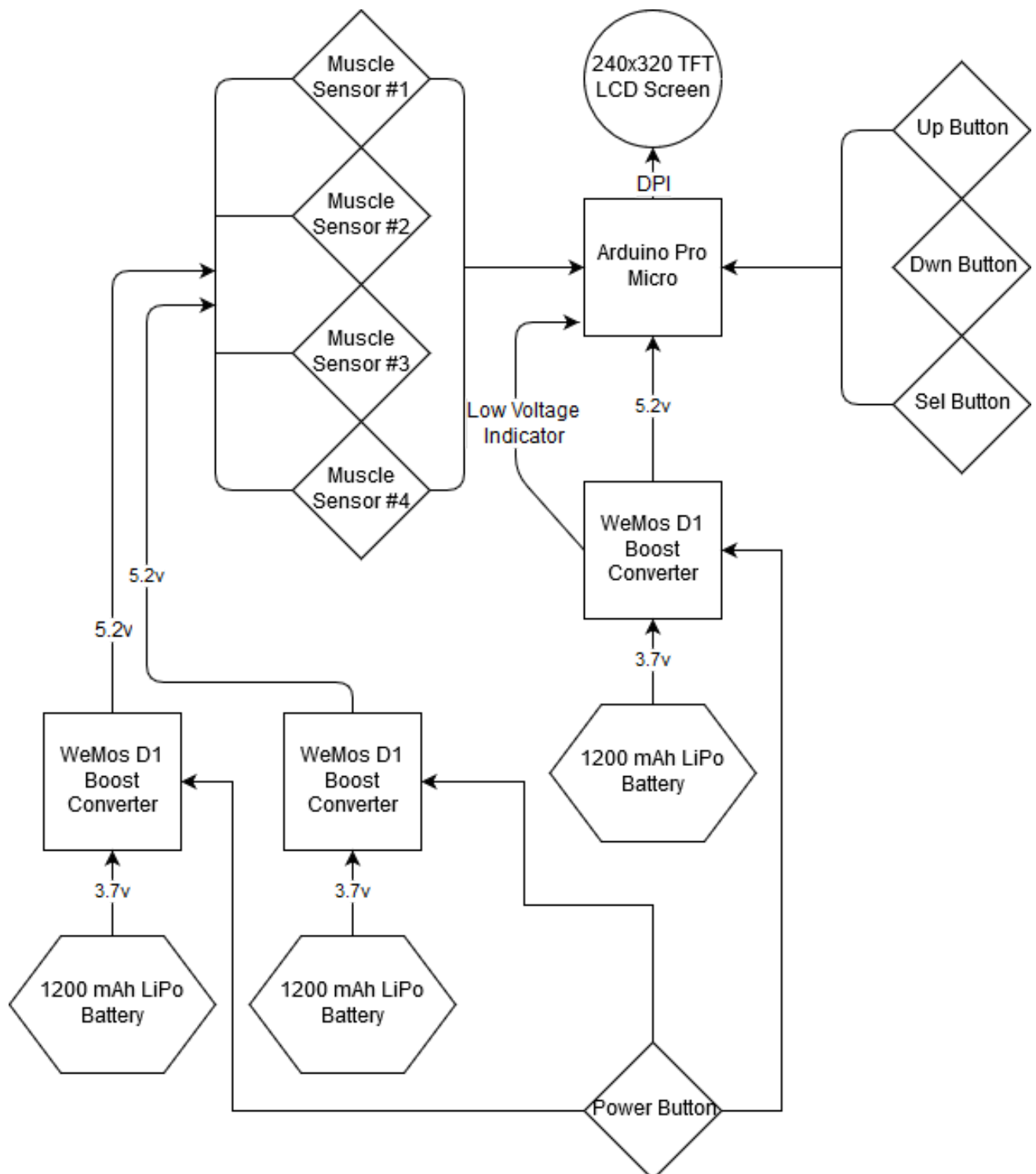
The Help Screen includes simple instructions on how to use and configure the device. The Sel key returns to the Main Menu.



About Screen

The About Screen includes information about the creator and contributors to the MGM.

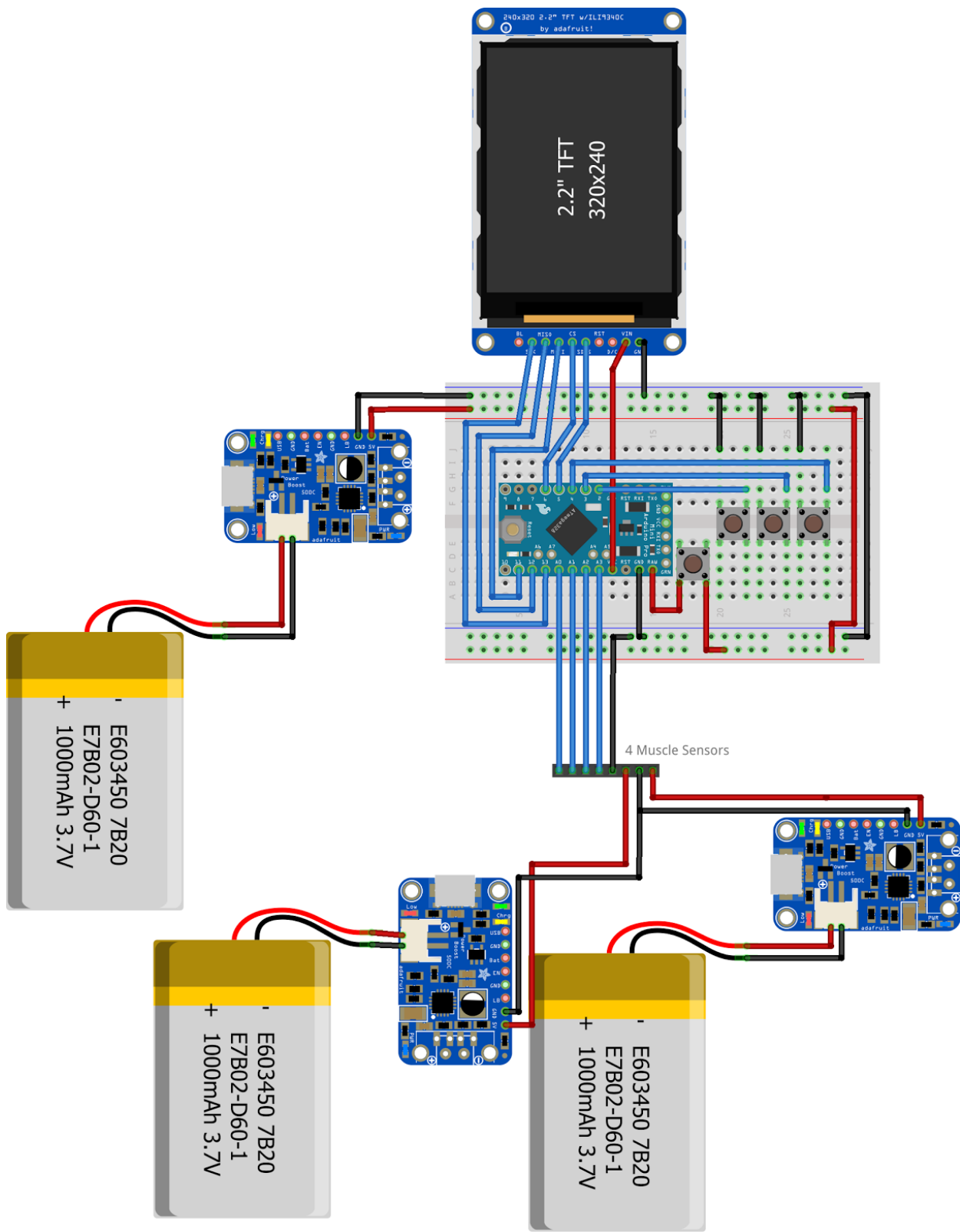
Component Sketch



Bill of Material

Name	Source	URL	Quantity	Cost
Arduino Pro Mini	Amazon	https://goo.gl/p1Ujp7	1	\$12.25
2.2" LCD Screen (240x320)	Amazon	https://goo.gl/UGjysu	1	\$16.59
1200mAh LiPo Battery	Amazon	https://goo.gl/7wHCqJ	3	\$42.99
10k Ohm Resistor	Amazon	https://goo.gl/kbJFvj	4	\$5.76
Pushbuttons	Amazon	https://goo.gl/F4RhA5	4	\$8.26
Muscle Sensors	Alibaba	https://goo.gl/VtKfPN	4	\$64.64
TP5410 Charger/Boost Converter	Ebay	https://goo.gl/WHf3HX	3	\$6.57
Male Header Pins	Amazon	https://goo.gl/7xYbQV	100	\$8.59
				\$165.65

Breadboard Model



fritzing