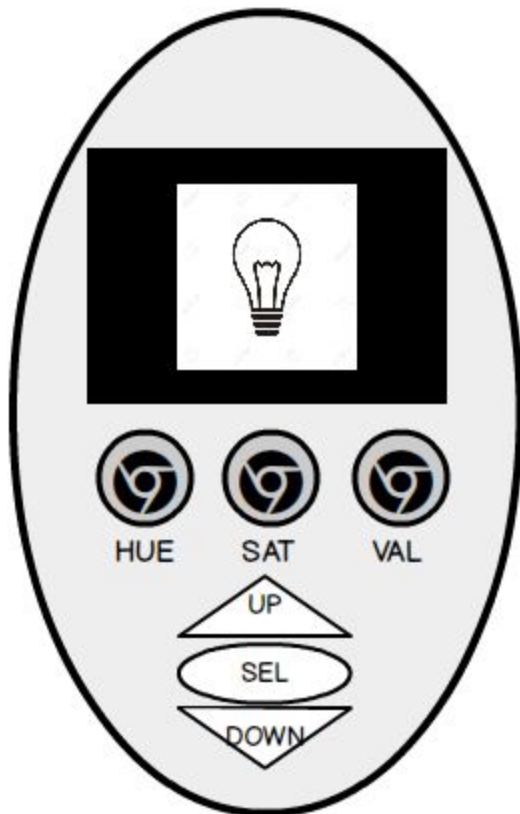


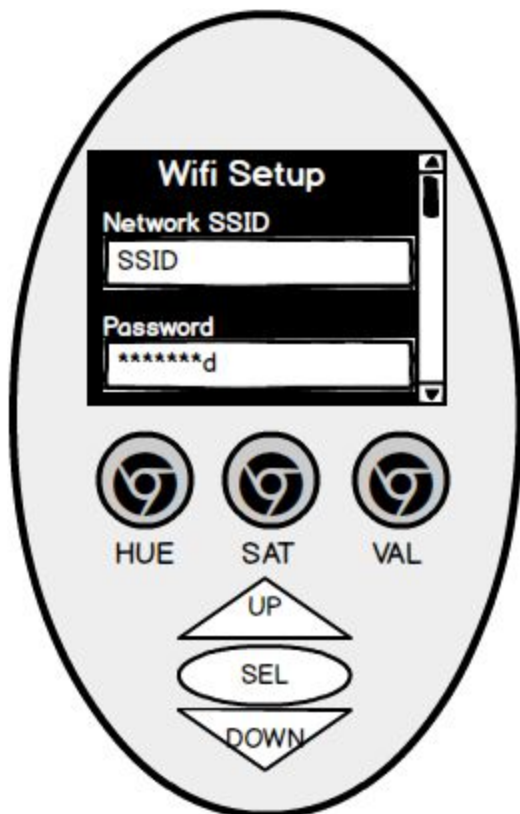
Function Development

Wireframe Storyboard



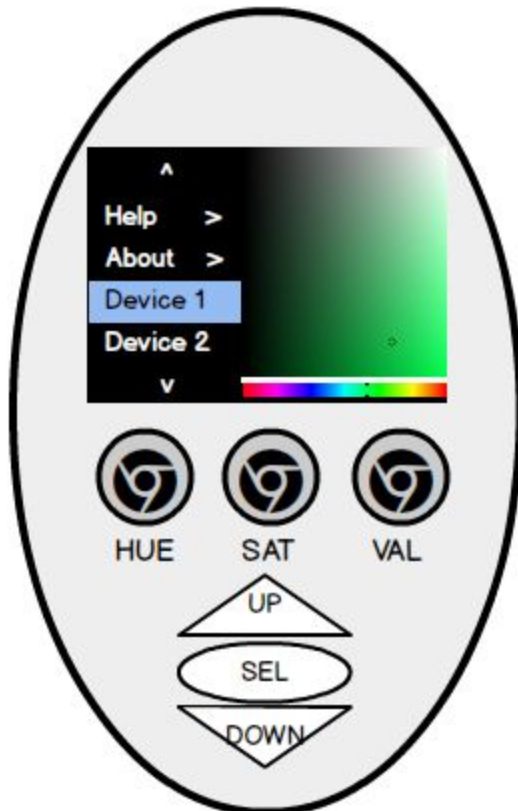
Splash Screen

The splash screen is the first thing to appear when the device starts up. It will display a logo while the device does its initial setup and loading.



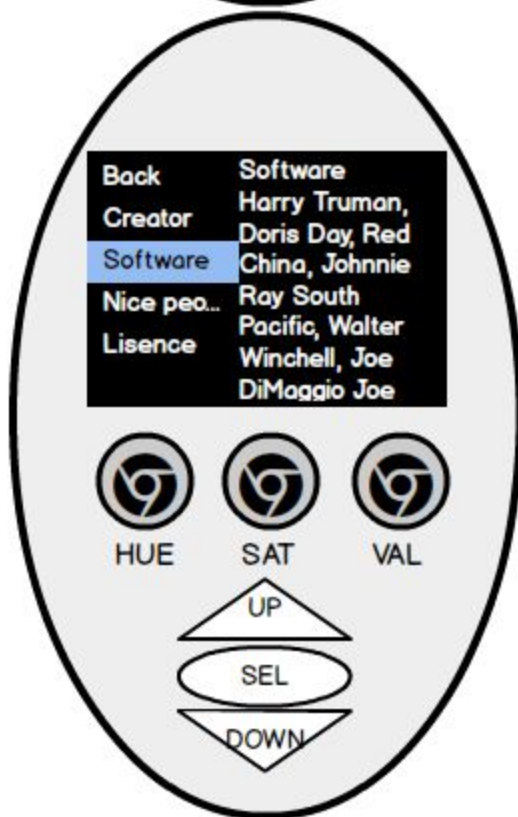
WiFi Setup

This is the page where the user goes to initially set up the WiFi configuration. It will default to this if the user has not configured the network yet. The user can use any of the 3 rotary encoders to select a character, which will go alphanumerically, starting with uppercase A - Z, then lowercase a - z, then numbers 0-9, then symbols. Once they hit the character they want, they proceed to the next one with the SEL button. The user selects the field they want to edit using the UP and DOWN buttons. Lower on the screen is an option for "Cancel" and "Submit"



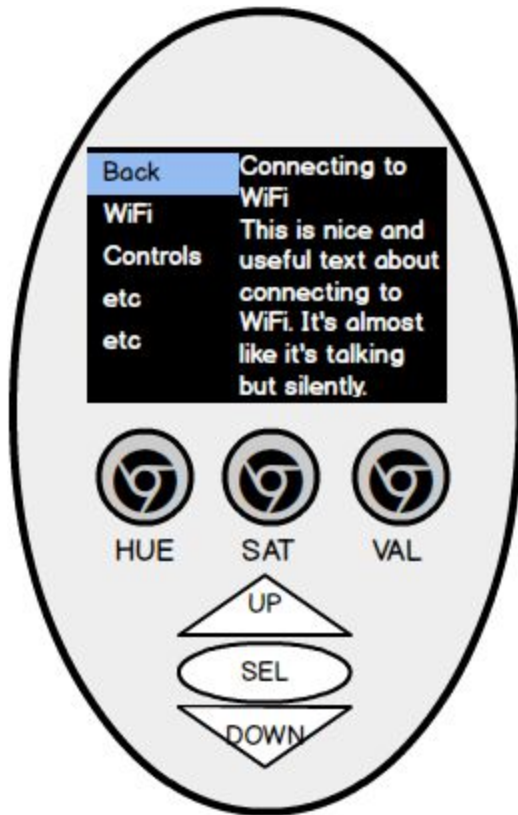
Main Menu/Main Function

The main screen contains most of the data the user needs all at once. They can choose the device they want to edit on the fly using the up and down buttons, without navigating through menus to cut down on time they have to be looking at the screen. It has an HSV color palette to the right of the menu where the rotary encoders change their respective values and push them out to the server.



About Menu

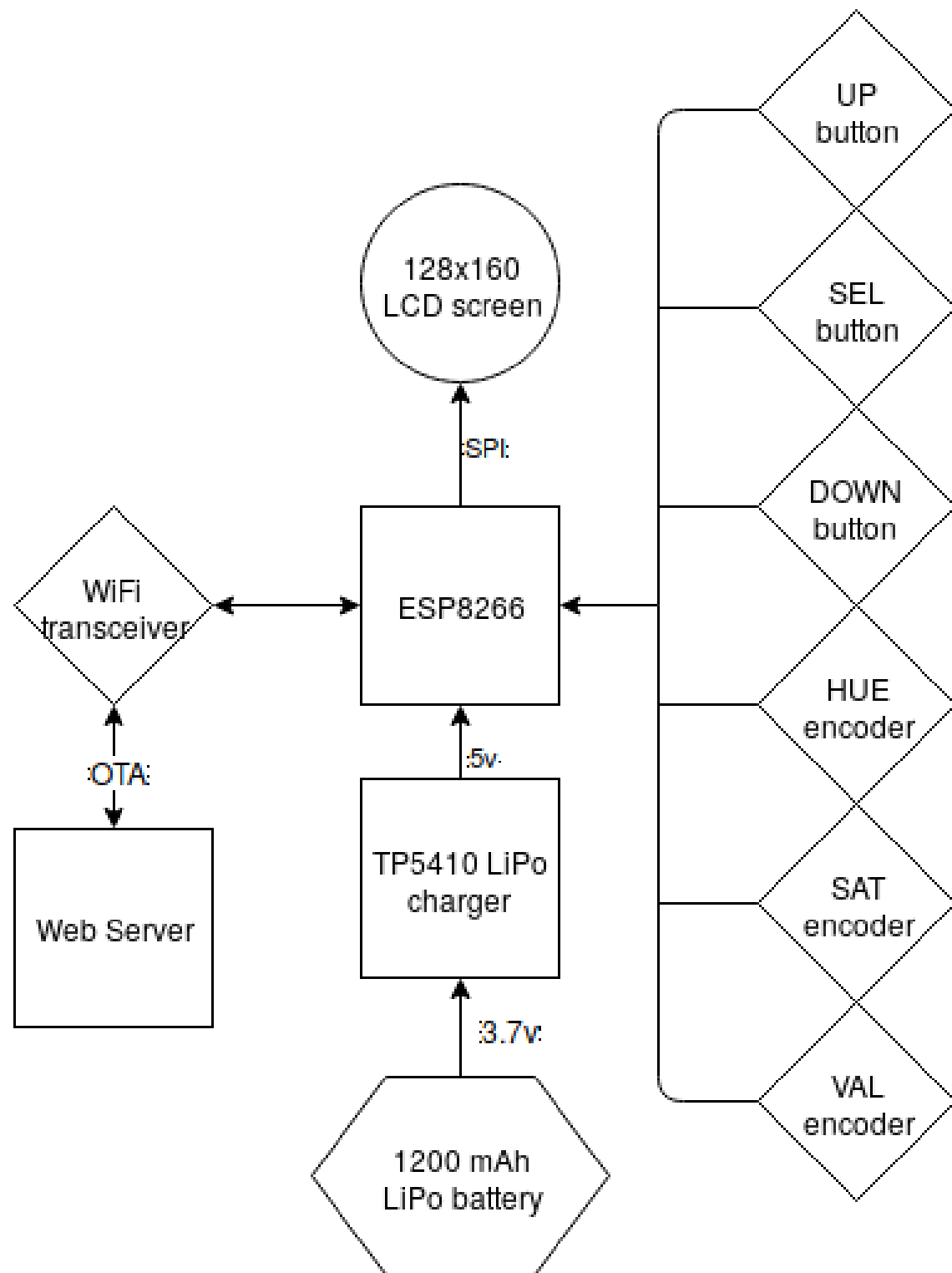
Has different items, selected via the up/down buttons. Any of the rotary encoders can be used to scroll up and down the page. The page itself is one large page, with different subheaders, kind of in a wiki format.



Help Menu

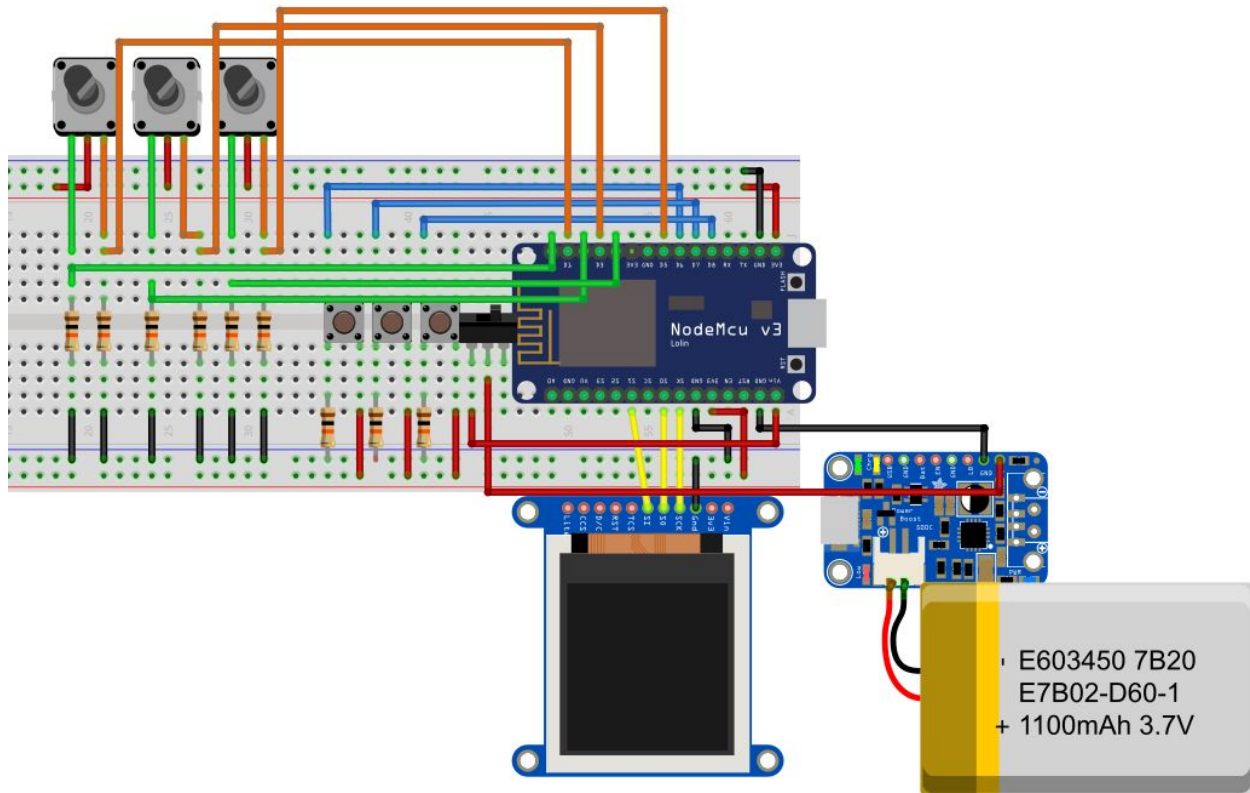
The help menu is laid out much like the about menu, with one continuous page with shortcuts in case the user wants to continuously read the page.

Component Sketch



Name	Source	URL	Qty.	Cost
1.8 inch SPI TFT LCD Display	Amazon	https://goo.gl/PTozjM	1	\$12.79
NodeMCU ESP8266	Amazon	https://goo.gl/MUHW1J	1	\$8.79
KY-040 Rotary Encoder	Amazon	https://goo.gl/KXj9F6	3	\$9.29
Push button	Amazon	https://goo.gl/u3WeNw	3	\$4.88
1200mAh LiPo battery	Amazon	https://goo.gl/fJZ7fa	1	\$9.99
TP5410 LiPo Battery Charge Board	Ebay	https://goo.gl/vSGBBh	1	\$2.19
10k Ohm Resistor	Amazon	https://goo.gl/24dCD3	9	\$2.25
Power Switch	Amazon	https://goo.gl/qadtPf	1	\$5.31
Total Cost:				\$55.49

Breadboard Model



Electronic Schematic

