GPIO Applet

<Purpose>

The purpose of this app is demonstrate a simple way to use G3 GPIO (general purpose input/output) pins. The app uses a GpioPin class that can be instanciated for every pin that is being used. The instantiated class name can - and should - be meaningful such as AlarmInput or MotorOutput.

<UI description>

The UI is comprised of ... <describe the screen>

The buttons on the right side are for toggling the GPIO pins 1..4. See the documentation for the correct conection - GPIO0 is on the J22 connector on pin 4, for example.

<Running a test>

A simple exercise of the App is to tie GPIO0 and GPIO1 together.

GPIO0 is pin4 of the J22 connector. GPIO1 is pin3 of the J22 connector.

Toggle GPIO1 on the cponsole and watch the debug console to see the input of GPIO0 change vaalue to follow.

<IO description>

Input values are read directly or through polling in a timer. Check gpiopin.cpp in the setPoll method for the timer interval. Default is 250mS.

<Usage>

GPIO pin 0 is set to poll every 250 mSec and will display a message on the debug window when a change occurs.

One informative test is to connect GPIO0 and GPIO1 together. Then toggle GPIO1 and watch GPIO0 follow.

The ability to use interrupts is available but is beyond the scope of the Applet.

There is also a “Clear Console” button that is used to clear the screen of messages.

Messages scroll down the display but you will preiodically need to clear them as the number of lines that the window shows is different based on the LCD resolution.