The CSE321 LCD Library Files

This part of cpp and h files provide all the structures and methods necessary to implement an LCD with either a 1602 or 1802(this is the one from Mouser) controller. The libraries have been configured that the implementation necessities are the same.

Step 1: Add appropriate files

- If you have a seeed model, it should say 1802 on the back - put the 1802.h and 1802.cpp files in your project folder
- If you have a 1602, it will look like there is a thing soldered on the back. - put the lcd1602.h and lcd1602.cpp files in your project folder

Step 2: Include the h file in your main file

Step 3: Construct your LCD object

Add the following line above the start of your “int main()” in your code and replace the parameters as appropriate. You also need to choose an objName to use.

CSE321_LCD objName(col, row, dots, SDA, SLA);

- col = number of columns on the display
- row = number of rows
- dots = either LCD_5x10DOTS or LCD_5x8DOTS
- SDA = the pin that corresponds to the SDA line for the i2c chanel you are going to use
- SCL = the pin that corresponds to the SCL line for the i2c chanel you are going to use

Step 4: Initialize the LCD

- Call the method: begin()

Step 5: Use as needed

API functions for your object you will need

- clear()
  - Clear the display for the current cursor row
- setCursor(a,b)
  - Puts cursor in col **a** and row **b**, note indexing starts at 0
- print(“stuff”)
  - Prints strings to LCD