A. Introduction to the Feather M0 processor board

https://learn.adafruit.com/adafruit-feather-m0-wifi-atwinc1500/

1. Read thru the Overview and Pinouts sections.
2. Skip the Assembly section. NO SOLDERING NEEDED!
3. Skip the Power Management section.
4. Skip to Arduino IDE setup section, and follow the directions to install the correct board packages as shown.
5. Continue with Using with Arduino IDE.
   We need the Adafruit AVR Boards and the Adafruit SAMD Boards packages installed.
6. Install any needed Windows drivers.
7. Load the Blink example into the IDE and run it.
   Don’t go further until your Blink sketch runs successfully.
8. Continue with **Using the WiFi Module**. Download and install the **Arduino WiFi101 library**, and continue with **Check Connections & Version**. Pay special attention to the note in **RED**, and add the two lines shown to the **CheckWifi101Firmware** sketch.

Read through the rest of this section, updating firmware if necessary, and continue to **Scanning WiFi**.
When successful, continue to the end of the page with **WiFi101->ScanNetworks**, **WiFi101->WiFiWebClient**, and **WiFi101->AP_SimpleWebServer**.

**Congratulations! You now know how to connect to the internet!**
B. OLED Display

The OLED display connects to VCC (3.3V), GND, SCL and SDA on the processor using the I2C protocol. For wiring, see the photo on page 1 and the pinout diagram above. Notice that the processor is plugged with 2 rows below and 1 row above, and 3V3 is connected to the + bus strip and GND to the – bus strip. SDA is pin 20 and SCL is pin 21 as shown under I2C Data Pins on the Pinouts page. This version has a resolution of 128X64 pixels, one color. It uses the SSD1306 display driver, and will work with the Adafruit libraries.

Here is more information on a similar OLED:
https://learn.adafruit.com/adafruit-oled-featherwing/usage

You will need to install the Adafruit SSD1306 library and the Adafruit GFX library. Then load the example Adafruit_SSD1306->ssd1306_128x64_i2c.
You will need to find this line in the setup section:

    if(!display.begin(SSD1306_SWITCHCAPVCC, 0x3D)) { // Address 0x3D

And change 0x3D to 0x3C for this version of the display to correct an error in the code.
The display should show the graphics demo. Study this sketch to understand how to integrate the display into your future project code. Demonstrate your finished work to the course staff.