Unit 4 Lab 7
Learning Targets

Essential Questions

- Can we use a BLE connection to send custom commands?
- Can we connect the Feather Sense over BLE to the desktop computer?

Key takeaways

- Using the UARTService() allows us to interact with the BLE device in a way similar to a serial/USB connection.
- Using the uart object allows us to send any type of text “command” so the command options are limitless.
- Adafruit has Python libraries which can be used by a desktop computer to connect to BLE devices.
- If the desktop computer does not have BLE builtin, a BLE dongle can usually be plugged into a USB port to provide BLE connectivity.

Teaching Tips

The code provided to begin Lab 7 should look a bit similar to the way students dealt with file objects in the past. Similar methods are used when working with the uart object.

Most Mac computers have builtin BLE.

For windows based machines this BLE dongle works well to provide BLE access. https://www.amazon.com/gp/product/B071X46MT2/

See the notes in the Lab 7 solutions about installing the required modules for use in the Mu editor.

Encourage students to take it slowly and stay organized as they switch back and forth between Python mode and CircuitPython mode in the Mu editor.