

Journal 7

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1 Progress Log

Fixed naming conflicts with the buttons, added new buttons for stopping and starting the scan.

Created a Github repository for the application.

Addressed an issue where the `ACCESS_FINE_LOCATION` and `ACCESS_COARSE_LOCATION` permissions were not properly handled outside of the `androidmanifest.xml` file. This issue was preventing the device from bonding with objects discovered by the BLE scan.

Previously scanning found hundreds of "null" devices and also found the same devices repeatedly. Fixed this so that each discovered device is only reported once and "null" devices are disregarded.

2 Next Steps

Implement the functionality to connect to a discovered BLE device. Create a client-server relationship where the user's device is a client querying data from the BLE module which acts as a server.

Receive data (in hexadecimal) from the BLE module and convert it to a plaintext CSV file. Display the CSV within the app (possibly update it live as new data is received).

Give user the option to store the CSV on the device or email it to themselves.

Upgrade to a Samsung Galaxy S7

3 Reflection

This week was mainly devoted to polishing the scanning functionality of the app and making it more usable. Previously it was basically impossible to actually find the discovered device because of the mess of null objects. The application is now pretty much ready to start a BLE Gatt connection to a discovered device.