

Individual Weekly Report

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Team: Bray IIoT Smart Solutions

Date: 03/31/2025

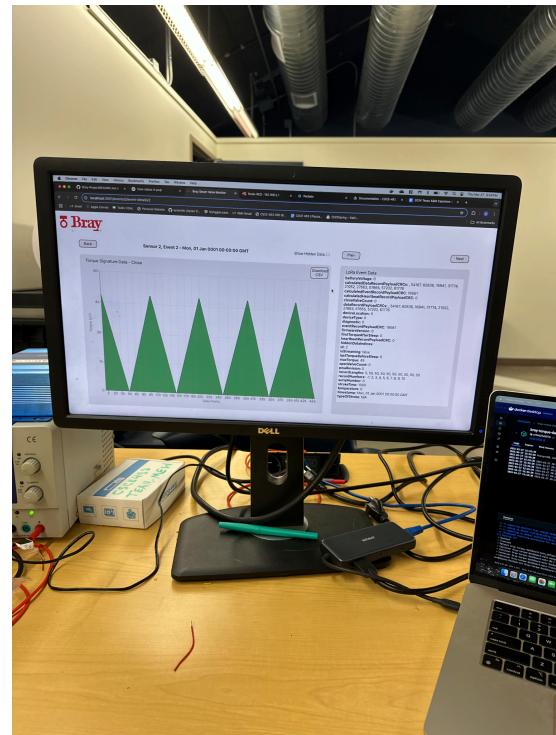
Current Status

- What did you personally work on this past week?

Task	Status	Time Spent
Re-designing our backend (Again :))	In progress	2hr
Integrating the LoRa sensor and gateway	Complete	4hr
Integrating the firmware with software	Complete*	3hr
Connecting gateway to software	Complete	2hr

Include screenshots/graphics to illustrate what you did this past week:

The screenshot shows a web-based application for monitoring network traffic. At the top, there are several tabs: Packets, GradeScope, printing, AMCT Drive, ChatGPT, Capstone Drive, CSC1-483 (Bray), 454, 454 pt.2, Cap GitHub, and Bray Firmware. The main content area has four sections: 1) Packets: A table showing recent join requests with columns for Device EUI, Freq, DataRate, SNR, RSSI, Size, Fcnt, Type, TX/RX Time, and Details. Two entries are listed: 39-33-33-32-56-32-78-14 at 925.900 SF10BW500 and 39-33-33-32-56-32-78-14 at 903.500 SF10BW125. 2) Recent Join Requests: A table showing a single entry: JOINER EUI 01:02:03:04:05:06-07-09 and DEVICE EUI 39-33-33-32-56-32-78-14, with a nonce of 30462, elapsed time of 24 ms, and result Success. 3) Recent Rx Packets: A graph showing the number of packets received over time. 4) GradeScope: A table showing TMST, FREQ, DATARATE, CRC, SNR, RSSI, SIZE, TYPE, and DATA.



2. What problems did you run into? What is your plan for them?

Fortunately we finally got the last team's project to work as intended. Unfortunately this revealed to us that there is a large chunk of work left to do. Ideally this step would've been done much earlier in the development process, but it didn't so we need to make extreme progress in these last few weeks. The plan to deal with this is to split work up between group members to make sure everyone is able to contribute to this workload along with giving every member more manageable workloads.

3. What is the current overall project status from your perspective?

We have made significant progress in these last few weeks. Whilst we are still behind as is the nature of the project since we were always delayed at every step, we still can finish before the end of the semester by working a bit after the development period ends.

4. How is your team functioning from your perspective?

The team is functioning fine, once again we still need to have certain team members show more initiative. Otherwise, there is a fine team balance.

5. What new ideas did you have or skills did you develop this week?

Through working on integrating the conduit and firmware as well as the conduit and software I learned valuable debugging skills related to solving a problem that has a murky solution. When the objects wouldn't connect, there was never any significant feedback about the issue, this required doing research to try and understand the project better.

6. Who was your most awesome team member this week and why?

Aysen De La Cruz, I think Aysen is committing a lot of effort to this project that makes him a standout member of this team. He has been consistently working outside of class hours and making significant contributions by being persistent.

Plans for Next Week

What are you going to work on next week?

This week we are going to need to implement all of the software elements. Since we finally have a way to test the project we can implement these new features successfully. This for me means that I will be updating the database to integrate the legacy project and our updated project. With this, it includes updating the MQTT code such that it can handle the dummy torque data as well as the real live auxiliary sensor data.