

## Individual Weekly Report

**Name: Matthew Livesay**

**Team:** Bray

**Date:** 3/17/25

## Current Status

1. What did you **personally** work on this past week?

Task	Status	Time Spent
Picked up torque bracket simulator	Done	3 hrs
Purchased clamp	Done	45 min
Ran firmware in debug mode	Done	1 hr

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

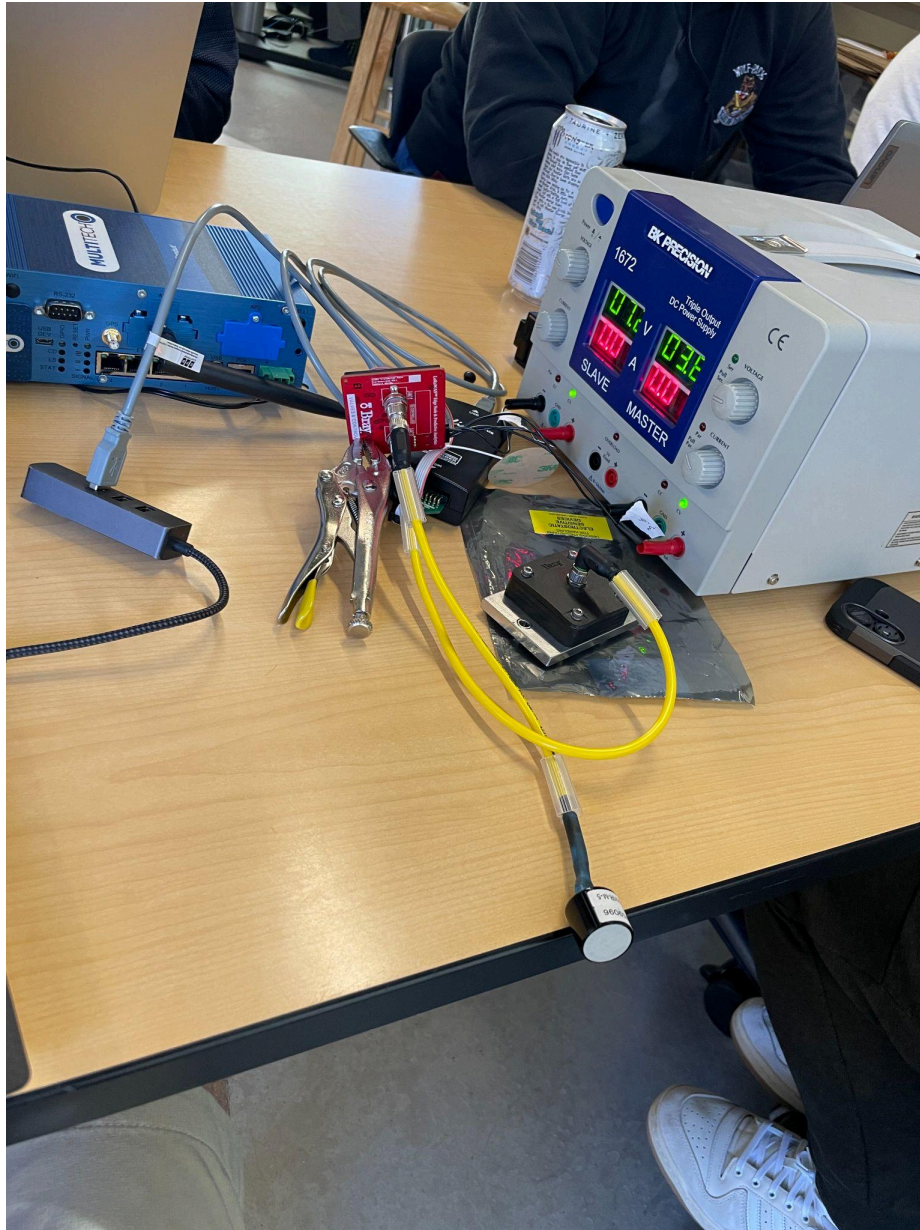
The image shows a screenshot of the STM32CubeIDE environment. The main editor displays a C source file named 'main.c' with the following code:

```
393 // **
394 * @brief The application entry point.
395 * @retval int
396 */
397 int main(void)
398 {
399     //WORD_VAL calc_crc;
400     //uint8_t tmp_buffer[8];
401
402     //uint8_t ascii_char[5], num_digits;
403
404     /* Reset of all peripherals, Initializes the Flash interface and the SysTick. */
405     HAL_Init();
406
407     /* Configure the system clock */
408     SystemClock_Config();
409
410     SystemApp_Init();
411     /* USER CODE BEGIN SysInit */
412
413     Hkeeping_rec_start_time();
414
415     HAL_Delay(1000);    // Wait before init rest, needed??
416
417     Pygo_GPIO_Init();
418
419     /*
420     #ifndef APP_EMULATION
421     HAL_DBGMCU_EnableDBGSleepMode();
422     HAL_DBGMCU_EnableDBGStopMode();
423     HAL_DBGMCU_EnableDBGStandbyMode();
424     GPIO_InitTypeDef.Pin = GPIO_PIN_13 | GPIO_PIN_14;
425     GPIO_InitTypeDef.Mode = GPIO_MODE_ITFT;
426     GPIO_InitTypeDef.Pull = GPIO_PULLDOWN;
427     HAL_GPIO_Init(GPIOA, &GPIO_InitTypeDef);
428     #endif
```

The right sidebar shows a 'Name' table with columns 'Name', 'Type', and 'Value'. The bottom console window shows the following output:

```
cmwx1zzabz_0xx Debug [STM32 C/C++ Application] [pid: 26]
Read register 'r11' (4 bytes) from hardware: 0xFFFFFFFF
Read register 'r12' (4 bytes) from hardware: 0xFFFFFFFF
Read register 'sp' (4 bytes) from hardware: 0xF4F0020
Read register 'lr' (4 bytes) from hardware: 0XA3690008
Read register 'pc' (4 bytes) from hardware: 0x2C4C0008
Read register 'xpsr' (4 bytes) from hardware: 0x00000061
Removing breakpoint @ address 0x08004C2C, Size = 2
Read 4 bytes @ address 0x08004C2C (Data = 0xFB7E002)
```

The status bar at the bottom indicates 'Writable', 'Smart Insert', and the address '405:1:11370'.



2. What problems did you run into? What is your plan for them?
  - a. Battery cable broke and will need to be re soldered, not a huge deal but annoying.
  - b. Backend will need to be restored to a state similar to the previous semester as we now have the ability to transmit and receive torque data
3. What is the current overall project status from your perspective?
  - a. Finally making some progress but starting to run short on time based on how things have been going
4. How is your team functioning from your perspective?

- a. Still functioning fine
- 5. What new ideas did you have or skills did you develop this week?
  - a. Debugging STM firmware
- 6. Who was your most awesome team member this week and why?
  - a. Aysen for riding down to bray with me to pick up the new module

#### **Plans for Next Week**

Work on budget

Hopefully get torque demo working

Solder sensor

Fix battery

Email bray about torque bracket spoofer