emStart Sprint 2 Status Report

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Project Recap

Background Recap

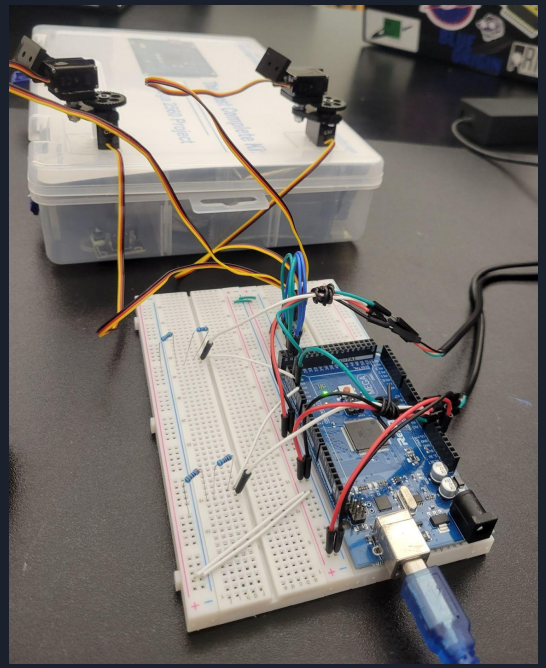
- Emulating system for an existing small radio telescope(SRT) in order to verify its operation as expected this includes its mechanical movement and Radio.

- As an additional requirement it must also emulate the rotation of the earth during testing.

Sprint 2 Accomplishments

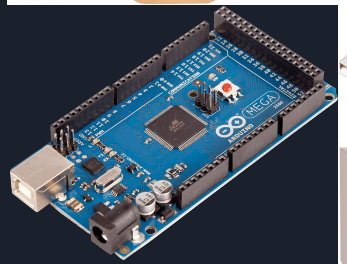
Obstacles

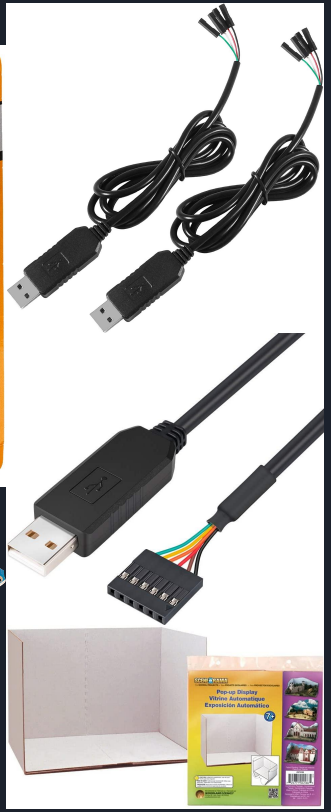
- Serial communication issues
- Servo actuation in the way we want it
- Hardware mounting
- Wire management
- Weight of servos



Additional Hardware Acquisition

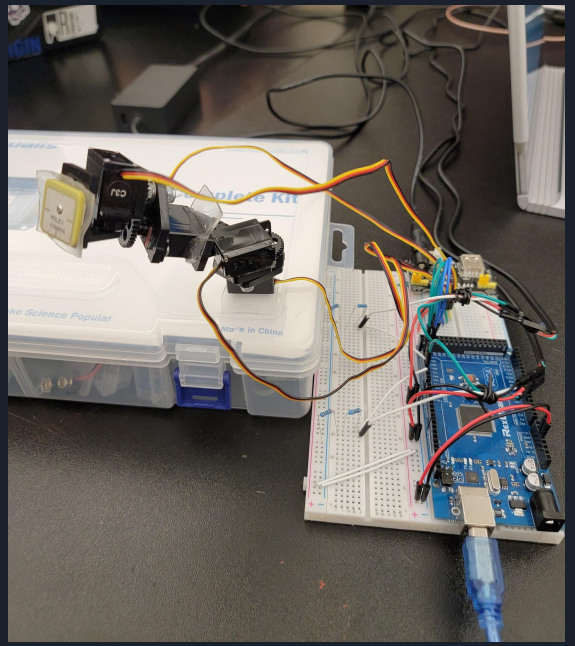
- Arduino Mega
- USB Serial Cables
- Double Sided Tape
- Mounting Board



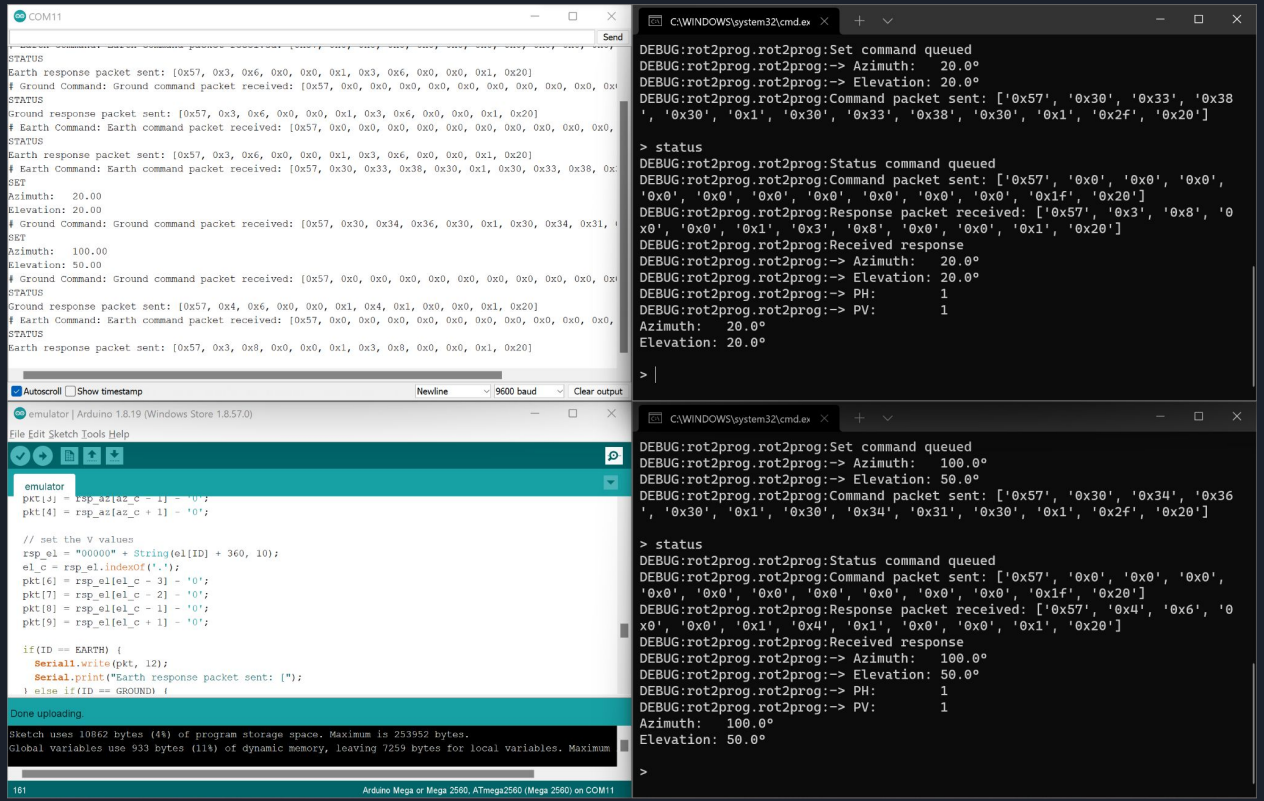


Hardware Progress

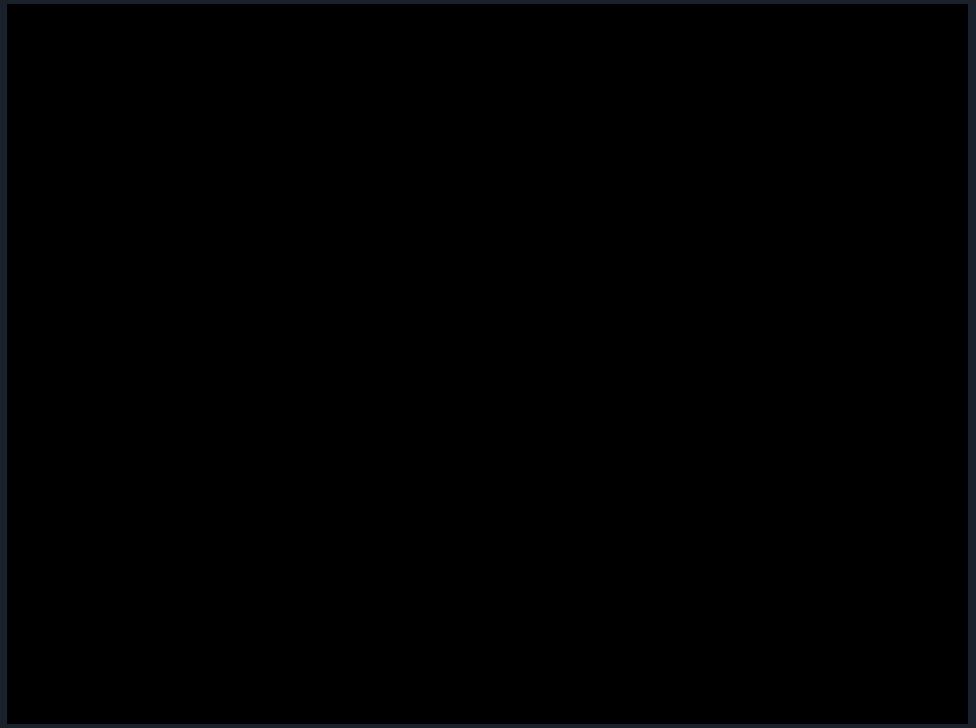
- Ground and Earth Servo Systems have been assembled and wired.
- Wiring for communication systems have been completed and verified.
- Patch antenna has been mounted to a new coax cable to facilitate ease of movement



Software Progress



Current Demo of System



Final Sprint Goals

- Improve documentation
- Simplify code
- Improve SRT code
- Finely tune the attenuator
- Add Earth GUI features
- Manual for High Schoolers

Questions?

Thank You!