Andrew Bachman

General Advice:

- Don't take it personally if your subsystem dissolves
- Respecting other teams is unnecessary
- Communication is key. Devin wants to begin midweek checkups (15 minute meetings to address concerns and progress)

Subsystem team goals:

1. Dashboard
    a. Inspected Documentation from 19/20, Manuals and Github
    b. ESP32 and E-Ink Display
    c. Meet with 19/20 students
    d. Brainstorm Technical Plans
    e. Test Display Code and Verify functionality
    f. Mechanical design necessary - Physical model before software
    g. Looking for collaboration with Chassis and hardware teams
    h. Goals: Develop a new mechanical design and send it to the machine shop, verify and expand Code functionality
2. Frame/Chassis
    a. Rules Compliant mounting for each subsystem
    b. SES submission before earliest deadline
    c. Replace all current rules violations
    d. "Respectful" interactions with each subsystem
3. Drivetrain
    a. Motor mount structural analysis
    b. Verify/reconsider the gear ratio
    c. Route wires through the frame more efficiently
4. Cooling
    a. Evaluate the current system and double check inventory
    b. Merge the cooling subsystem with the drivetrain
5. Motor
    a. Document the controller settings that control the motor
    b. Configure controller to send data through CAN BUS, and provide documentation to SCADA and CARMAN on interpreting the output from the motor controller.
    c. Develop Overheat protection through the CAN BUS data reporting.
6. SCADA
    a. Develop a read/write protocol for the CAN BUS system
    b. Maintenance tool to add and reconfigure sensors
    c. Build out instruction system for abstract sensors
    d. Redesign documentation to reflect updates
7. TSI
    a. Confirm Functionality
    b. Refactor Firmware (names and documentation)

    c. Test external connections
8. GLV
    a. Assemble and test new board
    b. Resolve voltage drop to AIRS issue
    c. Recreate safety loop schematic
    d. Integrate temp. And current sensors with SCADA
9. CarMan
    a.
10. Battery Packs
    a. Build a box that provides the motor controller/Tractive system with rules compliant voltage
    b. Communicate with software team to complete monitoring system for tractive voltage systems
11. Steering and Suspension (Braking)
    a. Develop a fully rules compliant mechanical model and simulate the model
    b. Design review within team
12. Interconnect
    a. Formulate system breakdown
    b. Create testbench to include all wires and connectors

Management Goals:

1. Made to Print design finished by end of fall semester
2. Assembly and testing finished before competition.
3. Win the competition
4. Provide all Deliverables
5. Develop Work Breakdown Structure and Work Packages