Capstone Notes

April 17, 2023

Status Update

What's been done since last week?

Project 1: Stewart Platform

Stewart platform is built. Ready for iteration 2.

Project 2: Mechanical for Rover

Previous rover parts are disassembled. CAD models are being made.

Project 3: Electrical for Motor/Motor Controllers

Project 4: Rover PDS

Buck modules are good and ready to be used. PCB is ready to be printed.

Project 5: Puzzle Panel PDS

PCB for puzzle panel PDS is ready to be printed.

Project 6: Software for Rover

Website is made for next week. Skeleton codes for motor/motor controllers are finished and ready to be tested.

Project 7: Image Processing

Little progress made. Need power supply for the Nano. Been working on connecting the camera to the Xavier. Will port the software over to Nano once power supply arrives.

Project 8: Inventory

About 90% of old rover is torn down and inventoried.

What's the plan for next week?

Project 1: Stewart Platform

Building the first iteration of the Stewart platform. Will begin on iteration 2.

Project 2: Mechanical for Rover

Designing Fusion 360 model for Mimir

Project 3: Electrical for Motor/Motor Controllers

Testing motors serially now

Project 4: Rover PDS

Ordering PCB

Project 5: Puzzle Panel PDS

Working on iteration 2: PCB instead of the Gikfun boards

Project 6: Software for Rover

Skeleton nodes are already done. Moving to working on software for existing iteration 1 of the Stewart platform for now.

Project 7: Image Processing

Will need to finish up the 2D object detection by next week