Cave Climate Monitor

Schedule of Semester Plan

Cave Gurus: Taylor J. Begay

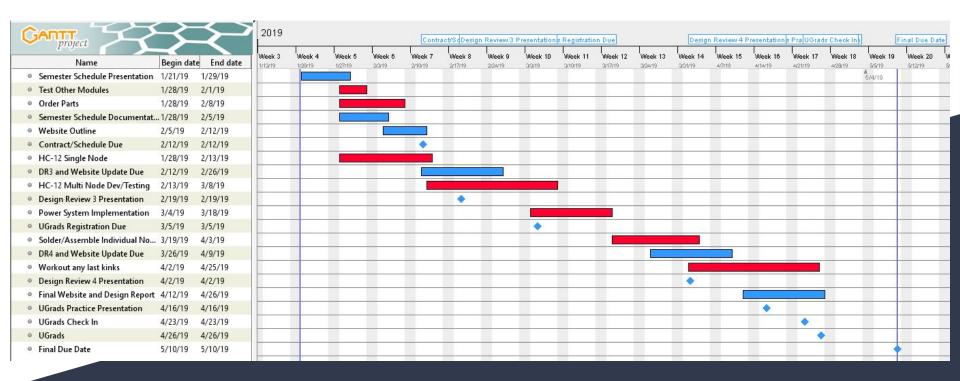
Yang Du

Jason Damp

Cheng Wang



Overview



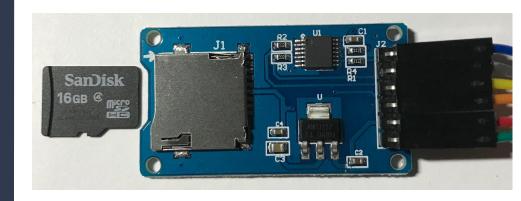
Subsystem 1 – Sensor

- BME/BMP280 Sensor
- Humidity, Pressure, Temperature
- Objective of Project



Subsystem 2 – Data Storage

- MicroSD Card Reader Adapter
- Store Sensor Data to MicroSD



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32.68,79405.13,74.57
36.55,79415.10,74.62
37.03,79408.14,74.71
36.19,79420.25,74.70
32.62,79417.48,74.68
37.85,79416.78,74.62
38.77,79418.56,74.62
37.21,79420.47,74.61
37.20,79415.96,74.64
36.88,79420.61,74.62
37.21,79410.05,74.62
37.21,79416.64,74.64
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Taylor Begay

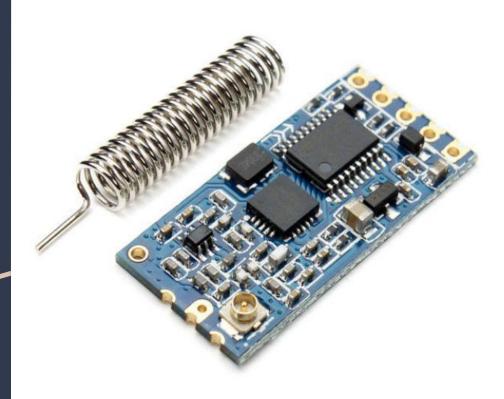
Subsystem 3 – Real Time Clock

- DS3231 Real-Time Clock Module
- Record data regularly
- Control power mode of microcontroller-low consumption



Subsystem 4-HC-12 Transceivers

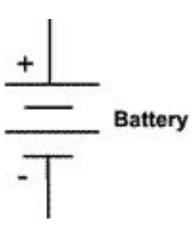
- Wireless communication module
- Send/pass data from node to node
- Integration with other modules by I2C bus



Cheng Wang

Subsystem 5 - Battery

- Best efficiency for whole system
- Match requirement



Closing

- Progress has been Strong and Steady
- We hope we can follow the Gantt chart outlined at the beginning of the slides
- We look forward to updating everyone on our progress in a few weeks!