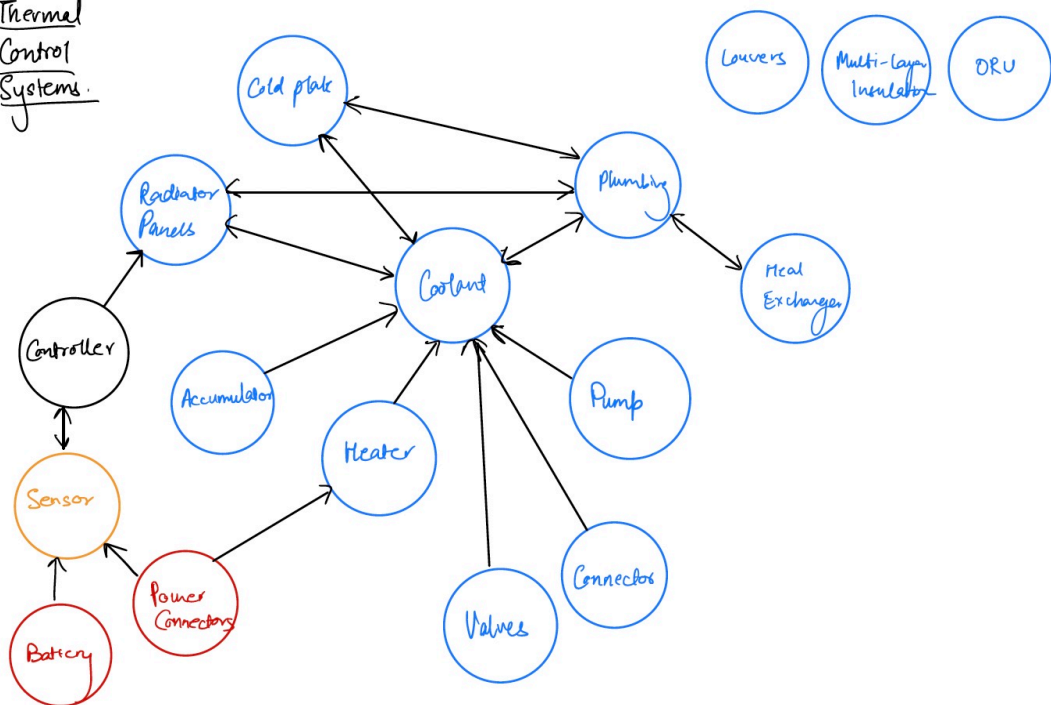Action Items

DOCUMENT THE DESIGN

1. Model the external thermal control system
2. Model the internal thermal control system
3. Model different disruption types into applicable elements of external + internal thermal control system.

4. Complete functionality models for all the elements in the habitat - i.e what do you want to model ? 11/29
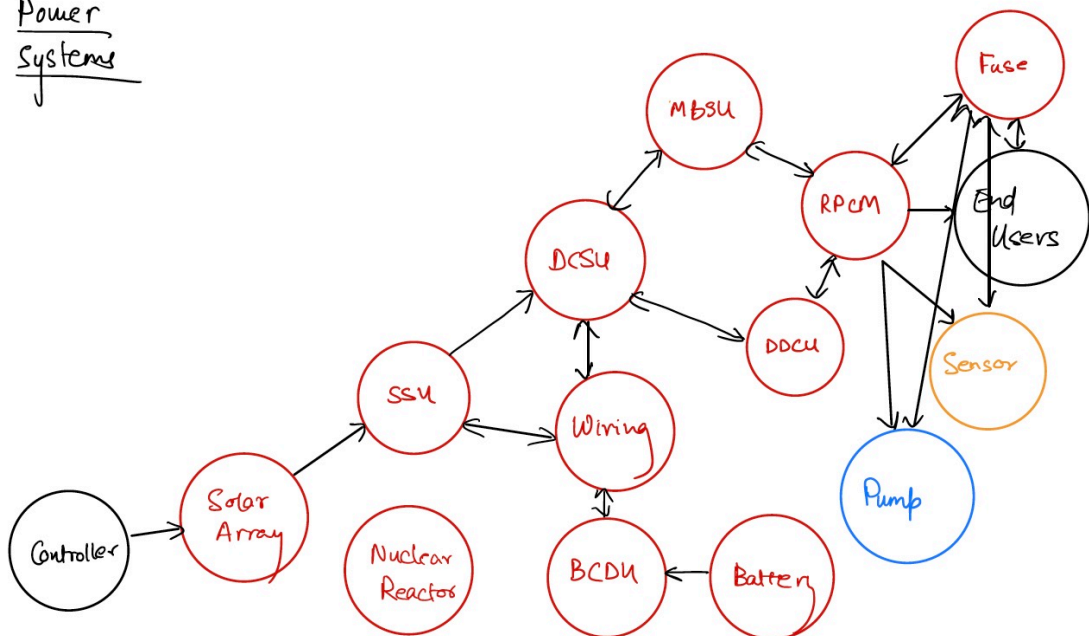   ... and document it.

Control-Oriented Dynamic Computational Modeling Platform

System Model.

- Thermal Control System
- Power System.
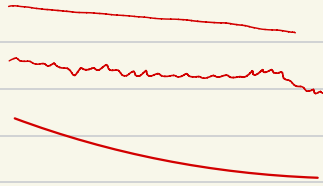
Thermal Control Systems.

Diagram nodes: Cold plate, Plumbing, Louvers, Multi-Layer Insulation, ORU, Radiator Panels, Coolant, Heal Exchanger, Controller, Accumulator, Heater, Pump, Sensor, Connector, Power Connectors, Valves, Battery

Power Systems

Diagram nodes: Fuse, MBSU, RPCM, End Users, DCSU, DDCU, Sensor, SSU, Wiring, Pump, Controller, Solar Array, Nuclear Reactor, BCDU, Battery
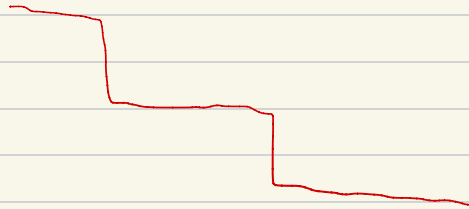
Disruptions
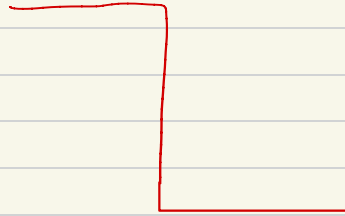
Continous Health State

discrete Heath State

binary Health State

instantiated by user
randomly instantied by software

time restrained
time unrestrained

Safety Controls.

preventative
mitigative
    periodic / conditional maintenance
    safe mode operations
    performance / perseverance
interventive
    component repair, recovery, replacement.