Senior Design Update Meeting 1 2/7/25

- Prototype/finalized design of the body
  - $\circ$   $\,$  Open up the legs for ease of access
  - Ovular shape for access
  - No threading
- Schafer's comments for the body
  - Bottom of legs will matter
  - Article on hack-a-day for threading
    - Make whole larger and places where it bulges
  - Senior Design website for print code
    - Filament is free
  - Can make mounting hole as big as we want since something will be pressed against
  - Look for dreamweaver
    - Adobe high end website development
- Power and motor
  - $\circ$   $\;$  Weren't sure what to use for torque ratings
  - RC batteries are most common
  - Worried about discharging
  - $\circ$  Couldn't find data sheets for voltage protection
- Schafer's comments for motors and power
  - Stalling leads to stripped gears
  - Duracell has datasheets for batteries
  - $\circ$  18650 batteries would be obvious choice if we used replaceable
  - $\circ$   $\,$  Charging depends on access and weight distribution
  - Can use D-cells
  - Lithium batteries would be a good choice to source a lot of current
    - Are some in the back office
  - Could use a hole and USB for charging
  - Look into how RC vehicles use batteries
    - Is there protection built into it?
  - Using a MOSFET
    - Circuitry to monitor the voltage
    - Turns on and off MOSFET when it gets to a level below the desired threshold
- Website
  - Upload HTML file "top\_page"
  - Can Link to other things within

- Can use ND template or build our own
- Has to be resident tech
  - Can't link to a google drive cause Schafer can't download
- Dreamweaver
  - Debartolo computer lab has some