

# CYSF Log Book

Dec 14

- Met with friends to discuss a STEM project
- Consulted about different sources and programs to make the project

Dec 18

- Bought an Arduino Nano and researched uses and capabilities
- Read and found docs about Arduino

Dec 26 - Jan 3

- Experimented with Arduino, creating a working code for an IR(infrared) sensor to move a stepper motor
- Attempted to wire the IR sensor and stepper motor, but fried the Arduino
- Diagnosed the issue and fixed it, as well as making it move

Jan 8

- Found and brainstormed how to improve Dorian Todds "Sesame."
- Ordered parts from Amazon

Jan 12-Feb 1

- Parts arrived
- Met with friends for Science Olympics and honed my CAD skills by designing the Geneva Mechanism
- Started CAD design on Onshape and coding
- Printed and tested various sizes and lengths for servo shafts and holders
- Found many problems with the main body, like being unable to align the holes on the breadboard and finding spacing for the wires

Feb 3-6

- Started CYSF project
- Finalized CAD design, printed parts, and fixed main issues with the body
- Studied the wiring guide and figured out how to use Sesame Studios

Feb 8-27

- Assembled the parts to complete the robot
- Created walking and other animations
- Tried soldering for the first time and failed, /second hand smoking from the chemicals
- Eventually, correctly soldered the pins to the breadboard
- Finished assembling and coding the robot

Feb 28- Mar 3

- Conducting experiments and procedures
- Finalized CYSF

Mar 4  
DONE!