

## **Log Book**

### **November 26, 2023 (First Day)**

Explored different topics and picked our topic.

- Predicting the performance of a wind turbine through AI software

### **November 27, 2023**

We both worked and finished background research about wind turbines and a rough drawing of our wind turbine. Added citations of links and websites used. Finished writing our hypothesis and research on the CYSF platform. Kavyaa went to the Dollar Store and bought all the materials. (400 popsicle sticks, trifold, hot glue gun, hot glue gun sticks, basket, and sharpie)

### **November 28, 2023**

We both started to work on the rough copy of our wind turbine and explored techniques that might help us improve the good copy.

### **November 29, 2023**

We worked on the rough copy of our wind turbine and experimented with different shapes and styles.

### **December 2, 2023**

Started to work on the good copy of our windmill

### **December 9, 2023**

We worked on our good copy, blades were made using plastic cups. Finished it within 7 hours

### **December 16, 2023**

Placed the windmill in front of the fan and checked how well it worked. We checked for possible sources of error.

### **December 23, 2023**

One big source of error was that for the blades we used plastic cups, but that was too heavy so we had to switch to paper to get it to work.

### **December 30, 2023**

Tried again by placing the physical copy of the windmill in front of the fan to check how well it worked now after making some adjustments.

### **January 6, 2024**

Fixed any final possible sources of error like making the base steady.

### **January 13, 2024**

Completed "sources of error" on the CYSF platform

**January 20, 2024**

Wrote out our observations and analysis on the CYSF platform, and finished it within 6 hours.

**January 27, 2024**

Wrote our completed procedure on the CYSF platform (completed). Wrote our used variables on the CYSF platform, and finished.

**February 3, 2024**

Filled out the application section on the CYSF platform, and worked together to finish it within 2 hours

**February 10, 2024**

Finished the acknowledgment section on the CYSF platform.

**March 2, 2024**

Finally, we added our conclusion of what happened to the CYSF platform.

**March 9, 2024**

At this point, we had finished everything that needed to be finished online on the CYSF platform and finished a physical copy of the windmill. Ready for submission.