

# Problem Statement Matrix

Jerry Wang

Pen Sorting

Every year before school starts, students all over America are often plagued with finding school supplies. This includes the need to find certain pens of certain colors. Sometimes, it becomes a pain in order to find a correct colored pen in order to take notes or finish assignments. A sorter could check each pen and organize them. It would also be beneficial to have it check and throw out the pens that have exceeded their lifetime.

Circuit Breaker Detector

Around the world every year, there are power outages that take place. Whenever a power outage occurs, circuit breakers pop in order to protect devices from damage. But, if you did not know that the circuit breaker popped, it would be a hassle to not know about this until it was too late. A circuit breaker detector could be beneficial in reminding people the disconnection of their charging and their devices (mainly phones and tablets) within their homes so that they would not befall misfortune later in the day.

Sight Conservation

Every day all around the world, people of all ages have deteriorating eyesight due to looking at electronic devices for extended periods of time. A sensor can be used to monitor the amount of time that a person spends looking at a monitor or a screen. This can help control the amount of time that was spent on an electronic device and improve eyesight that plagues many people around the world.

		Problem Statement Ideas		
Criteria	Weight	Pen Sorting	Circuit Breaker Detector	Sight Conversation
The problem can be accomplished in the given time.	2	2	2	1
The problem can be solved with the available resources.	2	2	1	1
Initial research indicates that others also believe the problem exists.	1	2	1	2
The solution is likely to meet a specific need and/or be marketable.	1	2	2	2
The problem is interesting enough to keep the team interested.	1	2	1	2
The problem is complex enough to require additional thinking and/or	1	2	0	2
Total Score		16	10	12