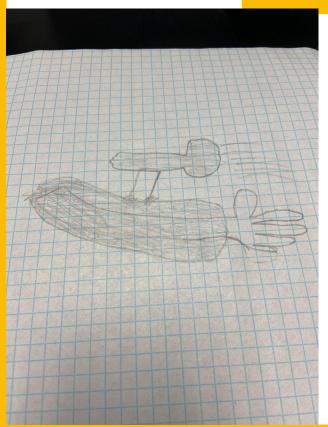
Design Statement

We would make a light source for a person out camping or a person in the dark in need of light. It would be stitched into the jacket around the wrist area, and the around where it is stitched there would be an on/off button that would be easily accessible. This product would be a great item for anyone, especially children. When they where it on their wrist, they can think of it as a super human power, like a Tony Stark. It could be a helpful tool in the dark. But also a fun toy for the little kids. But remember, anyone can use it.

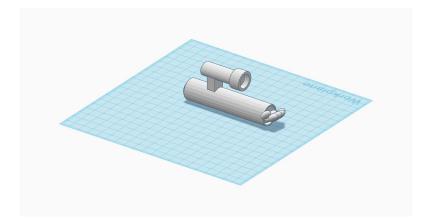
Target Audience

Target audience would be anyone outside camping, hunting, or outside in the dark who is in need of a flashlight. The target audience could be of all ages and all ages will be able to understand and use the flashlight. It'll be simple and easy to use. It'll be a great help when it is dark

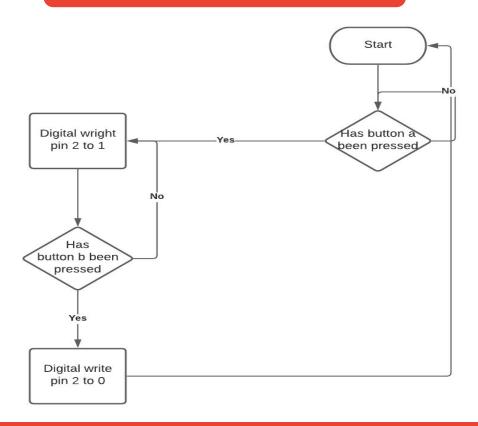
Design Sketch



7 ½ in. Length 2 ½ in. width 2 ½ in. height



Flowchart



Code

```
on start
  radio set group 69
on button A ▼ pressed
                                           on button B ▼ pressed
  radio send string "let there be light"
                                             radio send number 5
```

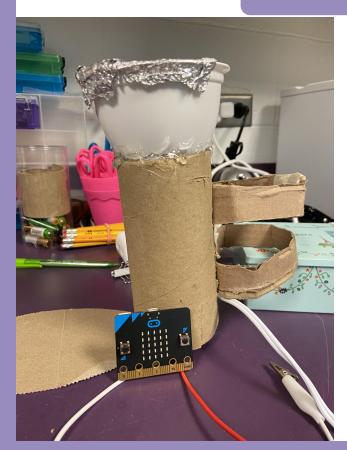
```
on start
 radio set group 69
                        on radio received receivedString
                          ■ digital write pin P2 ▼ to 1
                        on radio received receivedNumber
                         □ digital write pin P2 ▼ to 0
```

Problems/Solutions

Constraints

- Weight must be accessible for all audiences
- Needs to be available for a variety of audiences
- Must be able to be activated by person or environment
 Finished product needs to be orderly and not
- Finished product needs to be orderly and not have many wires

Image(s) / Video





Reflections/Analysis

We had a lot of ups and downs with certain things for this project like coding, building, fixing bugs, and etc. We struggled making the light bright enough and we learned that the battery power limited the brightness. We also realized that we needed access to the wires and batteries after we connected the wires, so next time we would design a removable panel for easier access. We would mainly change the time limit of the project because we needed more time on this.

We worked progressively by coming to class early in the morning or before class started. We all had jobs to mainly work on so everything would get done more efficiently. And we also contacted our partners when they were absent through a google meet to help us get done faster. Overall, this was a fun project to help create, we had a lot of fun with problems to solve and what jobs we got to do. We showed lots of effort, teamwork, and we were all working efficiently.