**User Stories:**

1. As a member of the military I want to be able to determine the location of danger so we may be able to retreat from any threat
2. As an environmental specialist, I want to be able to find beneficial environments so we may locate new resources that could be essential for survival
3. As a scientist I want to be able to distinguish positive decibels from negative, so we may know when something has gone awry
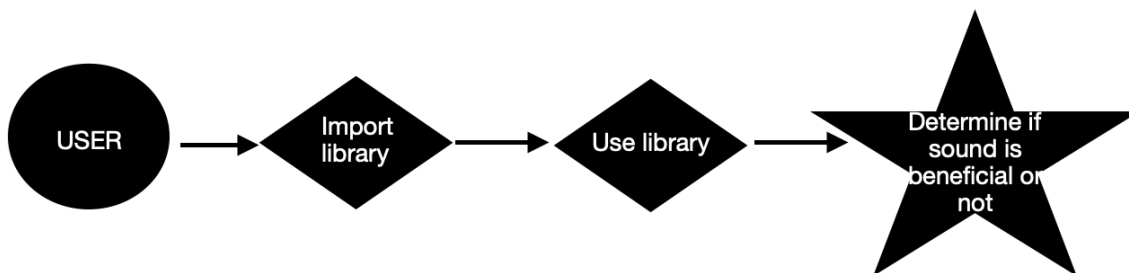
Design Diagrams:

Design D0 -
In this diagram, the user, represented by a circle, uses the new library to reach the goal of determining whether or not the sound detected is positive or a notice for danger

USER → Use library → Determine if sound is beneficial or not
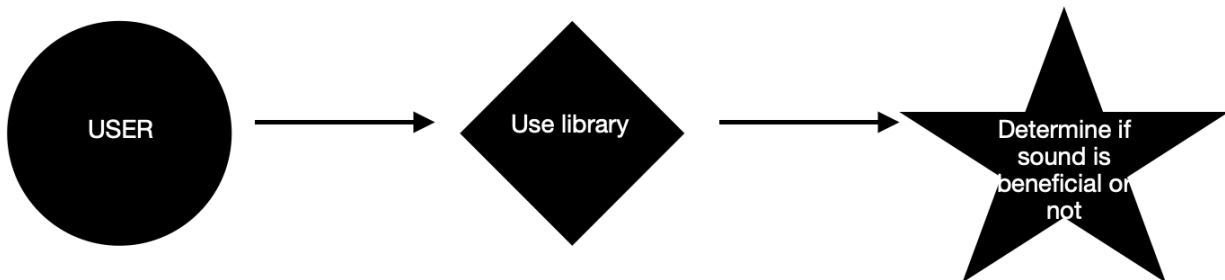
Design D1:
This diagram shows the process the user will have to go through to reach the end goal of determine the type of sound/decibel heard.

USER → Import library → Use library → Determine if sound is beneficial or not

Design D2:

This diagram shows the process the user goes through to reach the end goal in more details. The user first imports the library and determines if they want to modify it or not. If modification is not needed, then the user simply uses the library as is. If there is sound the robot will go through the process of picking it up, determining its location, before finally, moving to said location. Once this is done, the robot will then determine wether the sound is beneficial or dangerous

USER → Import library

Import library → Modify library if needed

Modify library if needed → Use library

Use library → Robot picks up subtle sound

Robot picks up subtle sound → Robot finds sound location

Robot finds sound location → Robot navigates to sound

Robot navigates to sound → Determine if sound is beneficial or not