

Bridges to Computing

Light Seeking Robot

What is a robot?

- »A robot is a machine that can perform tasks and can interact with their environment through sensors and effectors.
- »You can program your machine to do what you want it to do.

Description of Problem

»The purpose of this experiment is to make a Robot that can find its way out of a dark room.

Application in the “Real World”

- » The purpose of this idea was thinking about a little children. For example, if children have this robot and there is a fire in the next room and the electricity goes out the robot can lead them out the room
- » The other application is that the robot can guide a fire man from a smoky room and can help a lost person in danger get out the dark room

Improvements

- »I need to make the robot recognize when it is outside the box
- »I could program the robot to use a camera to get out of the room
- »I can improve the robot programming so he always does what I program it to do no matter the conditions

Problems faced

- » First, I needed to repeat a set of commands so I used the “jump” command
- » Second, I had trouble connecting the commands with wires in the program
- » Third, I had trouble finding the command that waits for light reading to increase by a certain value before moving to the next command
- » Fourth problem that I had was that the robot was not detecting the light as expected