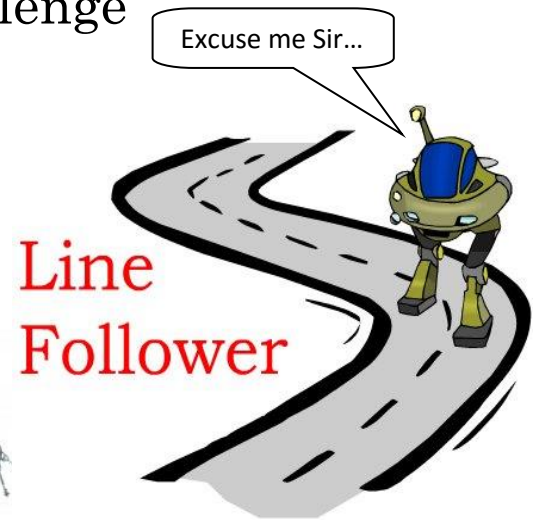


Line Follower Challenge

The Problem

You have been hired by warehouse in Vancouver to create the software for a Security Bot. The Robot's task is to roam a warehouse on a fixed path and warn employees of any suspicious objects it finds on its journey.



Specific Objectives:

- Create a program that allows your NXT robot to follow **any** path of electrical tape placed on the ground.
- Your robot must use its *sonar sensor* to notice when intruders are in front of it. Upon noticing an intruder your robot must alert staff with a sound. When the danger is gone your robot should continue on its security duties.
- Although not completely necessary in this case, you can use variables for sonar, light, and color sensor values. (optional).

To gain exemplary status:

Instruct your robot to **capture** any “intruders” it finds. (Intruders will be a Styrofoam cup or object of similar size shape and weight)

Have your robot complete its security rounds in the *shortest time possible*.

You must hand in both an Algorithm and correct Code for this project.

Marking:

See Assessment for Learning Table