

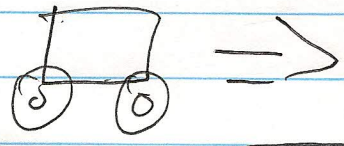
The Line Follower of Doom!

Robot Engineering Notebook

Michael

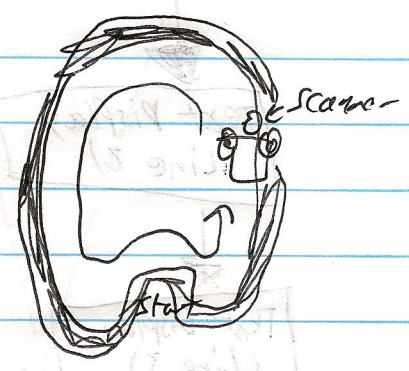
Robot

Land Robot - Drive to certain location, following a line

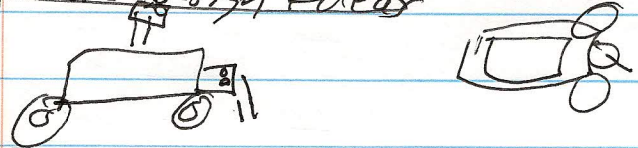


Task


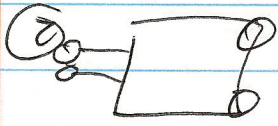
- 1 Drive Forward
- 2 Follow line using light sensor
- 3 turn when line does
- 4 Stop

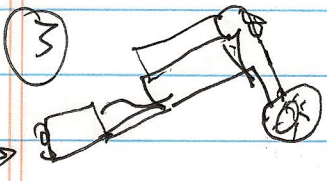


Possible Design Ideas



Tests

- 1  - Calibration for commands were wrong
- unstable back
- 2  - wrong commands (light sensor)

- 3  - added Text Display
- commands were correct

~~Pseudo~~



Pseudo Code

Start

Display Text
(Line 3)

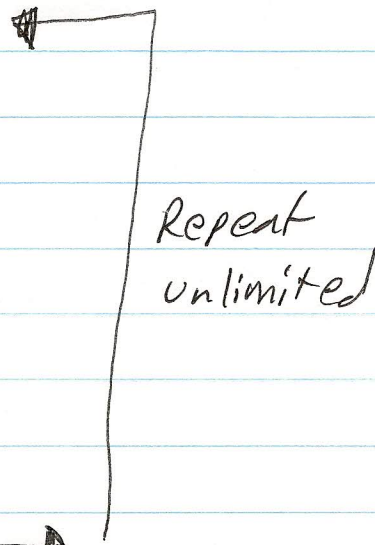
Display Text
(Line 4)

Display Text
(Line 5)

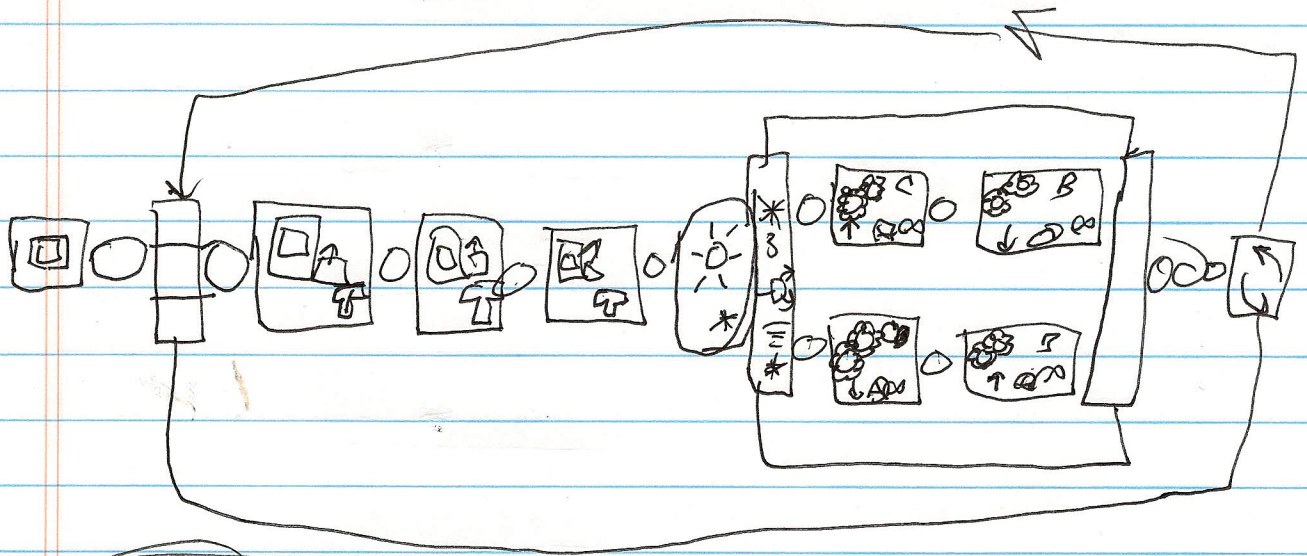
Wait for
Light
sensor

Follow Line
(Alternate Right
and Left motor)

End



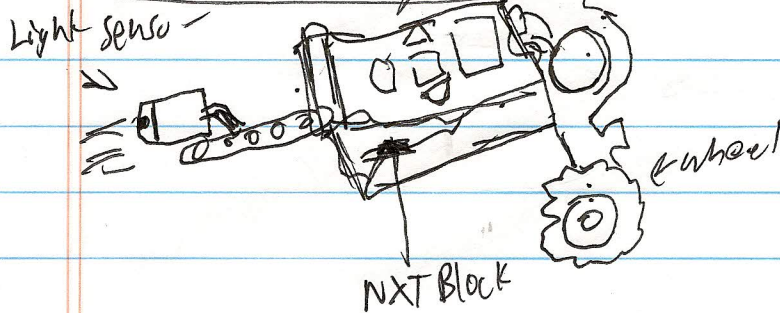
Software Code



Code Modifications

- Added Display Texts (3 lines)
- Configured movement direction + power (40 apart)
- Added repeat to make it work

Final Robot Design



Potential for Improvement

- Balance back easier so robot isn't leaning forward
- Add ultrasonic sensor for depth perception
- more sensors (touch/sound)