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QuadraTot User Guide

You will need:

- Robot
  - Bluetooth receiver
  - Infrared LED
- Computer power supply
- Charger for the motors
- WiiMote

To run the robot:

1. Plug in the computer's power supply and turn on the computer.
2. Set the robot where it will be walking.
3. ssh into the robot. Login as "team" and the password.
4. Type "screen" to start multiple terminal session within a single window. ("Ctrl a c" creates a new session, "Ctrl a n" changes between sessions, and "Ctrl a d" keeps the sessions running and returns to the original session. To return to the multiple sessions from the original, type "screen –x".)
5. Have the WiiMote handy and navigate to the WiiTrackServer (s/quadratot/code/wii/).
6. Run ./WiiTrackServer with the parameter "8080" to indicate port 8080. You will then be prompted to push buttons 1 and 2 and the WiiMote.
7. After a moment, the WiiMote should be discovered and a menu will be displayed. Type "t" and push enter to start tracking.
8. Hang the WiiMote over the robot, perhaps via the velcro available on the ceiling.
9. Start a new terminal session by hitting "Ctrl a c" and navigate to "s/quadratot/code/".
10. Open "optimize.py" for editing (vim optimize.py).
11. In the method "doRun()", delete the "#" in front of the desired strategy and make sure the other strategies are commented out with the "#". Save and exit the file (Esc :wq).
12. To run the selected strategy, type "./optimize.py". This will start the selected strategy with a random vector. To specify a starting vector, run optimize.py and give the desired vector as a single parameter in quotes, with a space between each value.
13. If the robot walks out of the range of the WiiMote, a message will be displayed asking you to move the robot back into view. Hit enter after moving the robot.