# 6/20/16

**See how and how the database was created (user)**

Show create table users;

**Show the databases, use a database and show the tables contained in the database.**

Show databases;

Use PS3Robot;

Show tables;

**Show the contents of the table called command.**

select \* from command;

**Install / create a database/user**

<http://www.raspberry-projects.com/pi/software_utilities/web-servers/mysql>

-To have the database on a RAM disk do this:

1. Allocate ram space.

<https://www.domoticz.com/wiki/Setting_up_a_RAM_drive_on_Raspberry_Pi>

2.Move mysql directory to the new space.

[http://tecadmin.net/change-default-mysql-data-directory-in-linux/#](http://tecadmin.net/change-default-mysql-data-directory-in-linux/)

**Re-install mysql**

sudo apt-get --purge remove mysql-server -y && sudo apt-get update -y && sudo apt-get install mysql-server –y

# 6/21/16

Two tables: one for robot status and one for control (command requests)

**status**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IP | Name | cdate | ctime | Enable/Disable  Motors (emotors) | PWM  Left | PWM  Right | PWM  Aux#1 | PWM  Aux#2 | Report  Status |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Control**

**Should have:**

-A motor speed multiplier (whole number or fractional) (double)

-Each command to have an enable/disable field to check game settings.

-

Something like that ?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IP | Name | cdate | ctime | Speed Multiplier | Speed Multiplier Enable | Speed Multiplier Left | Speed Multiplier Right | One sided speed enable | Aux multiplier | Aux multiplier enable | Aux enable |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

-So as far as control goes, there are multiple ways to command the robots. Do we want to have specific control directly from the server. ie: server can set all fields of the robot status to whatever it wants.

-We can also have a simple code. ie: 1 = can drive, 2 = speed boost for 20 seconds, 3 = stop robot.

- I think we could use the report status field with numerical codes, this way each number that is not ‘-1’ would correspond to a request from the robot. ie: rfid tag detected. A process can monitor the report status field and send data (from the control database) for which command and data needs to be sent to the robot.

**Using sqlite:**

Quite different, can’t get a table going yet..

# 6/22/16

**Optimizing sqlite on raspi**

<https://spin.atomicobject.com/2013/11/14/sqlite-raspberry-pi/>

**Fetch data from mysql database**

<https://scriptingmysql.wordpress.com/2011/09/09/retrieving-data-from-mysql-via-python/>

<https://kushaldas.in/posts/fetching-row-by-row-from-mysql-in-python.html>

**Delete data from a table in MySQL**

<http://www.mysqltutorial.org/mysql-delete-statement.aspx>

<http://dev.mysql.com/doc/refman/5.7/en/delete.html>