# Bugs Log – Buggy Solution

This file contains the bugs documentation, each but contains the place (File and function) in the code, a short description and the way it can be reproduced.

## Movement commands

### MoveRobot.cpp: move

The DL direction is wrong

**else if** (dir=="DL"){  
 x++;  
 y++;  
}

The result of DL will be the same as DR

To reproduce the error Place a robot and Move it (or MoveMulti) to DL direction. The only ‘catch’ is that the robot must not be located on (x=0). If the x coordinate equals to 0, the validation check of the direction will move outside the map (as it should be)

### Interface.cpp: while

The MoveMulti is corrupted, each 2nd command is getting lost.

cin >> dir;  
**do** {  
 move(name, dir);  
 cin >> dir;  
} **while** (dir != "end");

To reproduce the error Place a robot and use MoveMulti with ‘end’ only. The command will fail to end and will remain in the MoveMulti state.

## Data structures manipulation commands:

### RobotDB.cpp: delete\_robot

The function deletes only the robot, not deleting the relevant ranks and Tanks vectors.  
So deleting a robot won’t update the ranks and tanks for the rest.

robots.erase(iter\_r);  
cord\_x.erase(iter\_x);  
cord\_y.erase(iter\_y);

To reproduce the error create at least 2 robots, make the first one clean (a dirty place to fill both ranks and Tanks) and then delete that robot. The second robot will receive the rank and tank of the first (deleted) one.

### Interface.cpp: while

The Tank will be emptied only in the case it’s Full +1, instead of just full.

**if** (getTankCounter(index) <= TANK\_FULL) {

To reproduce the error create a robot and run the Clean command at least 6 times.

### Interface.cpp: while

Add Dirt function doesn’t check whether there’s a robot in the spot before adding dirt.

} **else if** (command == "AddDirt") {  
 cin >> x >> y;  
 addDirt(x, y);

To reproduce the error Use AddDirt command on a coordinate where a robot it located, then use clean command with the robot on the same spot. The error will be visible in the final results table.