A ROBOT DESCRIPTION DOCUMENT FOR THE 2005 CONTEST

GROUP NAME:
THE DRUNK ONES

MEMBERS:

Rocio Arroyo Valles - marrval@hotmail.com
Aljaz Osterman - aljaz.osterman@email.si
Gilda Tramontana - gasteropodone@libero.it

and

SPIRIT - our robot

From left to right: Gilda, Aljaz, Spirit and Rocio while they are trying to explore Mars.

For the final contest of our BEST summer course we designed a powerful robot with highly powerful ´brains´, so we are expecting at least successful accomplishment of our Mars mission. Therefore we are already looking forward for great honors, money and fame because of all the benefits that our mission will provide for people on Earth.

Our previous explorations predicted hostile environment on Mars, so our robot is designed to endure all possible physical impacts from any object. On its way it may meet many obstacles, passable or not, be shaken from possible earthquakes, drop into an asteroid hole, fall in a crack etc. So the construction is very stiff and compact, its weight assures good grip on all surfaces and even on slopes, it can survive even mayor drops in size many times bigger than his own. Thanks to very effective steering system using tracks, it can advance easily in every direction under different circumstances.

As seen from the Earth, life on Mars is similar to that we know, but for our robot the task is much more demanding. In order to work properly, the inputs must be incessantly checked and processed, so the robot can react on upcoming situations, but on the other hand it must be ready to perform some predefined tasks to reach the goals of the mission. Shortly, Mars is not a piece of cake.

Robot´s behavior is more or less double: first, it must follow the white path (line) with sufficient accuracy, and second, it must do special tasks where necessary and appropriate.
For time - efficient line following a special skill was developed, however because of different other demands it was changed with more reliable one, but slower.
As mentioned before, our robot has outstanding physical performances, so we believe that our robot will succeed in removing an obstacle from its path without difficulties. Some carefully designed algorithms permit the same for tasks concerning plateau, cave and wall following (avoiding a large obstacle). And if there was life on Mars, our robot would easily take part in rope-pulling contest with little-greens.

Our robot has also other virtues worth to mention, but as our space is limited, we want just to state out that it has extremely efficient power source, exploiting nuclear fision, and using its laser beam it can establish a connection for data transfer to Mars orbiting satellite and even further.

But this was just a lie I told
Hey doo da dey, hey doo da dey....