Simrobots: Johnny

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Team members
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About Johnny
Johnny is a two week old, not so smart robot built out of LEGO. Its brain consists of an RCX brick programmed in NQC. His senses are provided by two touch sensors on his bumper and a light sensor which points to the ground. The driving force comes from two motors.

Johnny is, like most robots, a descendant from the Roverbot, genetically modified to have both the touch sensor and the bumper in front. He can be employed to guard protected environments of the Natura 2000 program. His specialties are climbing slopes, exploring caves and removing rocks. The most important task of Johnny is to be able to follow a line. Every other task depends on this because the line leads him to the places where his jobs have to be done. The jobs are indicated by black spots, where Johnny has to accept the task or leave it to others.

Johnny's little brain works algorithmically, so he has to detect all the black spots to keep going. If he misses a black spot, he looses orientation and his tasks are consequently started at the wrong moment, which leads to total chaos. So the main problem during construction was the line following. The actual tasks afterwards are rather simple compared to the line tracking.