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Lego Mindstorms NXT 2.0 - First contact

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Couple of days ago to our company arrived LEGO Mindstors NXT 2.0 robot. Today I decided to bring it home for the first contact. It was quite successfull, I built starter robot that is avoiding obsticles and speaking. For about 2-3 hours of play, I think it is good enought.

What comes in the box

The box as you can see on picture is quite huge. So what is inside? Inside you got about 700 pieces from which you may build robot that looks however you like. Then you have NXT brick that contains 32 bit microprocessor, 4 input ports for sensors and 3 output ports for servo motors, matrix display, USB port and speaker. Also it comes with 3 servo motors and 4 sensors (Ultrasonic, Color and 2 Touch sensors).

Ultrasonic sensor gives sight to your robot and it can measure distance of your robot form some object. It can measure distance up to 256cm. Color sensor as name sais can detect color, but also it can be used as 3 color flashlight. Touch sensors detects touches. Also Mindstorms comes with CD with simplified version of LabView. Also it can be programmed with other development environements as Microsoft robotics or RoboC. For Now I will stay with what comes with box. If they say kid can programme it, for start it is cool.

First robot

In the manual there is guidelines for starter robot, that is quite amazing. It looks like robots from Short Circuit movie.

[youtube=http://www.youtube.com/watch?v=4TBcQ8h_kXU]

I have added Ultrasonic vision sensor and light sensor and I was able to start programming in about 2 hours of building robot. Quite amazing that you can build your own robot in 2 hours. My first goal was to build robot that will move around the place, avoiding obsticles and walls. With mindstorms development environement that is powered by LabView it is incredebly easy using blocks. You draw event driven diagram and press compile button. Robot is alive. Then I was playing a bit with flashlight and speaker. It has build in voices and also voices can be recorded. For test I created him to tell what command he will execute next (forward move or turn).

Here is short video how it looks and how it performs.

[youtube=http://www.youtube.com/watch?v=YcHtD2QpA8Q]

Conclusion

Lego Mindstorms NXT 2.0 is great tool for getting basics and even more in robotics and AI. I had great time assembling it and I cannot wait tommorow evening to see what next can I build using this lego toy for geeks.
