Robotics course
Spring 2018
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Exercises for February 21, 2018

We will work in groups, min. 2 students per Mindstorms set. It is important that all group members solve the exercises on their own computer, even if (perhaps) only one computer for each group gets connected to the Mindstorms EV3 brick.

1. Get LejoS up and running

Install Eclipse and the LeJOS plugin on your own computer as described in the moodle page and the LeJOS wikipages (linked from moodle).
Each group will be give a microSD card that contains the part of the LeJOS system that runs on the Mindstorms EV3 brick. You can insert the microSD into the slot on the brick, and it will automatically boot from the card when started. The first time the card is inserted, some reformatting of the card will take place, – takes maybe 10 minutes!

Get familar with the menu system on the Mindstorms EV3 brick, and do the following:

- Change the name of the Mindstorms EV3 brick as it will present itself when you try to set up a bluetooth connection. It is important to give it a unique name, otherwise we will have all brics presenting themselves as "EV3"! (We have marked the microSD cards with a number, so you get card no. *n*, you should name your EV3 brik "EV3-*n*").
- Make a bluetooth pairing of your computer and the EV3 brick; the connect them. This may require many repeated attempts, and there may also arise some confusions as we have many EV3's and other blootooth devices in the room at the same time. *IF IT WILL NOT WORK*, connect instead you computer and the brick with the USB cable and fix the blootooth connection later.
- Put together a hello-world program (see the LeJOS wiki and use features provided by the LeJOS Eclipse plugin) and execute it on the EV3 brick.

2. Test sensors on Mindstorms EV3 brick

Connect different sensors to the EV3 brick and test them via the menu system on the brick.

3. Controlling motors and sensorts from a program

Connect a sensor and motor to the brick and write a little program that makes it possible to affect the motor by the sensor (e.g., the motor rotates when you press a touch the sensor and stops when you release the press).