

Robot course

11-mar-2009

Program for today, and preparing
for the rest of the course

Today

1. Discussion and brainstorm: Which task and software architectures to work on in the rest of the course
2. Technical work: last part of the communication stuff.
3. Group discussion or all: prepare proposal for 1. Discuss in common forum
4. Continue with 2.

Rest of the course:

- **March 18:** Each group will give an overview of the (sub-) task, they want to solve and which technical challenges they expect, and how to solve them; if possible, present the overall structure of the software architecture that you aim at.
- **March 25 at latest:** Your teacher gives exact deadlines and requirements for the assignments to be given in.
- **The following weeks:** Working on the assignments. We work together in the same room each Wednesday. Each group may give short statement of how far they got and which problems they have been facing.
- **April 11:** Each group presents and demonstrates its solution, and if we are working on a common project, we demonstrate the entire cooperating machinery :)

Some ideas, but please make up your own:

Producing map of a room

behaviours + client/server, some aspects of
planning and matching problems,
multiple robots

Behavioural programming on your own computer?

Your own computer doing all the work
robot is dumb slave written in either Lego
or leJOS

Pros and cons

Cooperating robots

Two fork-lift trucks that locate a common item, lift it and move it synchronously

Multirobot version of room mapping

Traffic simulation using robots — is an instance of the cooperating robots; requires many robots

- **Motorway driving**
- **Motor race**