

27th November

Attendees

Chaoyi, Cong, Sam

Activities

Set up git repository. Set up project.

Exchange ideas for project.

Divide works for each member.

Arrange next meeting at 1st December.

1st December

Attendees

Chaoyi, Cong, Sam

Activities

Cong showed his work on Jason about simple communications between two agents, and decided to continue working with Jason and algorithms about localization and path finding. Sam decided to work with communications between PC and LeJOS using json library. We exchanged possible useful ideas from each other's previous group, and decided to work with algorithms first that using a simulator to test in a virtual environment.

We found the problem that Jason is asynchronous that actions will return immediately and will not wait for the robot. We then decided to change the Jason code that each plan ends with an action and new plans are awaked by new percepts after actions completed.

6th December

Attendees

Chaoyi, Cong, Sam

Activities

Members discussed the progress so far.

Localization and path finding algorithms were completed but they were not optimal, we decided to use this version first and update to optimal version if there are extra time. The emulator was completed and Sam pointed out a bug and then fixed it. We tested the algorithms using the emulator on university's PC and found that there's a small possibility that localization algorithm will end with 0 (failed to find where scout is). We also decided to add more information on GUI such as possible locations and headings.

Communication was completed and we decided to develop another emulator on the robot side to test both the algorithms and communications.

LeJOS code started written by Cong Bao.

10th December

Attendees

Chaoyi, Cong, Sam

Activities

Again members discussed progress so far.

The robot side's emulator was completed and communication was tested. Code were changed to interface oriented which was clear and easy to switch between emulator and real robot.

Pathfinding algorithm was modified to optimal version. Greedy strategy was applied to localization algorithm.

We found a bug in Jason that beliefs will not fire if percepts with same content were added. We then decided to add time stamps and fixed this bug.

LeJOS code was completed and the whole system was tested on arena.

Cong applied logistic function on robot's moving so the robot can adjust the distance of moving automatically.

All three arenas were tested and we decided to do the demo on 11th December.