

Presentation

Wednesday

What do we have? ¶

- Drone
- Java API to communicate with the drone
- Methods to fly manually with the drone

What are we going to do?

- Teaching the drone to deliver things indoor

How do we want to reach our goals?

- Teaching the drone to scan QR codes
 - Let the drone choose the best (new) way from this marker to the destination
 - Center the drone above a marker
 - Let the drone rotate to the right heading (if necessary)
- Using a algorithm on the computer to calculate the best way to reach the goal paying attention to obstacles
- Let the drone fly to the destination
- Let the drone correct it's actions during the flight (if the way is i.e. crossing the way of another drone)
- Teaching the drone to land at the destination

What did we do until now?

- Implemented QR code scanner (that recognizes that there is a marker and can read the code)
- Chose breadth first algorithm for the calculation of the best way
- Created a GUI to define the target and to visualize the route
- Prepared the calculation of the difference between the real heading and the desired heading

What can we present on Wednesday?

Team drone control

- Searching a marker with the drone
- Reading and decoding the QR code
- Landing near the QR code

Navigation team

- Simulating path finding around obstacles

Problems

1. The drone is drifting

Solutions

1. Fine-tuning

Future planing

- **Thursday**
 - Integrating components
 - Bug fixing
 - Recording video for final presentation
 - Preparation final presentation
- **Friday**
 - Last minute changes on presentation