Aims

- Learn about multiplexing
- Practice your ROS and coding skills
- Prepare for the final project
Multiplexing

- General concept
- In robotics, it is very useful to quickly switch between different sensors or different controllers (e.g., if one fails)
Multiplexing

Backup controller → Multiplexer → Control input ROS topic

Controller 1

position information, error messages, ...
Multiplexing

Backup controller → Multiplexer → Controller 1 → Control input ROS topic

- error message

position information, error messages, ...

- ROS topic
rqt_graph

- Allows quickly visualizing the currently running software stack
Multiplexing

- Multiple methods to implement multiplexing are possible
  - Hints and different methods are given in the handouts