

kuka
<ul style="list-style-type: none"> <li>- jointsState_: sensor_msgs::JointState</li> <li>- kinematicChain_: KDL::Chain</li> <li>- numJoints_: unsigned int</li> <li>- jointPosKdl_: KDL::JntArray</li> <li>- newJointPosKdl_: KDL::JntArray</li> <li>- currCartpos_: KDL::Frame</li> <li>- jointCommands_: trajectory_msgs::JointTrajectory</li> <li>- id: int</li> <li>- homePos_: trajectory_msgs::JointTrajectoryPoint</li> </ul>
<ul style="list-style-type: none"> <li>+ kuka()</li> <li>+ ~kuka()</li> <li>+ initializeTrajectoryPoint(): trajectory_msgs::JointTrajectory</li> <li>+ initializeHomePos(): trajectory_msgs::JointTrajectoryPoint</li> <li>+ initializeJointsSub(): sensor_msgs::JointState</li> <li>+ initializeJointsKDL(): KDL::JntArray</li> <li>+ makeChain(): KDL::Chain</li> <li>+ normalizePoints(KDL::JntArray): trajectory_msgs::JointTrajectoryPoint</li> <li>+ checkKinematicStatus(): bool</li> <li>+ getJoints(const sensor_msgs::JointState::ConstPtr&amp; )</li> <li>+ evalKinematicsIK(KDL::Frame): KDL::JntArray</li> <li>+ evalKinematicsFK(): KDL::Frame</li> <li>+ getJointNums(): unsigned int</li> <li>+ homeRobot(): trajectory_msgs::JointTrajectory</li> <li>+ driveRobot(): trajectory_msgs::JointTrajectory</li> <li>+ returnCurrentJoints(): KDL::JntArray</li> </ul>

Perception
<ul style="list-style-type: none"> <li>- n_: ros::NodeHandle</li> <li>- imgT_: image_transport::ImageTransport</li> <li>- cv_ptr_: cv_bridge::CvImagePtr</li> <li>- imageSubscriber_: image_transport::Subscriber</li> <li>- image_: sensor_msgs::Image</li> <li>- cylinder1_: std::vector&lt;int&gt;</li> <li>- cylinder2_: std::vector&lt;int&gt;</li> <li>- cylinder3_: std::vector&lt;int&gt;</li> </ul>
<ul style="list-style-type: none"> <li>+ Perception():</li> <li>+ ReadImage(msg: const sensor_msgs::ImageConstPtr)</li> <li>+ colorThresholder( color: std::string): int</li> </ul>

Grip
<ul style="list-style-type: none"> <li>- gripperOn: ros::ServiceClient</li> <li>- gripperOff: ros::ServiceClient</li> <li>- n: ros::NodeHandle</li> </ul>
<ul style="list-style-type: none"> <li>+ Grip()</li> <li>+ ~Grip()</li> <li>+ ToggleState()</li> </ul>