rclcpp::Node

PickAndPlace

- action_subscription_: rclcpp::Subscription<std_msgs::msg::String>::SharedPtr
- calib_pose_: geometry_msgs::msg::Pose
- current_action_: std::string
- current_object_: std::string = "case"
- empty_pose_: geometry_msgs::msg::Pose
- is_picking_: bool
+ move_group_interface_arm_: std::shared_ptr<moveit::planning_interface::MoveGroupInterface>
+ move_group_interface_gripper_: std::shared_ptr<moveit::planning_interface::MoveGroupInterface>
- my_plan_arm_: moveit::planning_interface::MoveGroupInterface::Plan
- my_plan_gripper_: moveit::planning_interface::MoveGroupInterface::Plan
- object_dimensions_: std::vector<double> = {0.0, 0.0, 0.0}
- object_pose_: geometry_msgs::msg::Pose
+ pi: float = std::atan(1)*4.0 {readOnly}
- PLANNING_GROUP_ARM_: std::string
- PLANNING_GROUP_GRIPPER_: std::string
- publisher_: rclcpp::Publisher<std_msgs::msg::String>::SharedPtr

+ calibrate(): void
+ computeYawAngle(geometry_msgs::msg::Pose): double
+ getCurrent_action(): std::string
+ getCurrent_object(): std::string
+ goToHoldingPos(): void
+ goToHomePos(): void
+ goToSearchPos(): void
+ goToSleepPos(): void
+ PickAndPlace(std::string, rclcpp::NodeOptions&)
+ pickObject(): void
+ placeObject(): void
+ planAndExecuteArm(): void
+ planAndExecuteGripper(): void
- publish_string(std::string): void
+ searchForObject(): void
- searchForTagFrame(double, std::string): geometry_msgs::msg::Pose
- setPoseFromTransform(geometry_msgs::msg::TransformStamped): geometry_msgs::msg::Pose
- split(std::string&, char): std::vector<std::string> {query}
- topic_callback(std_msgs::msg::String&): void {query}