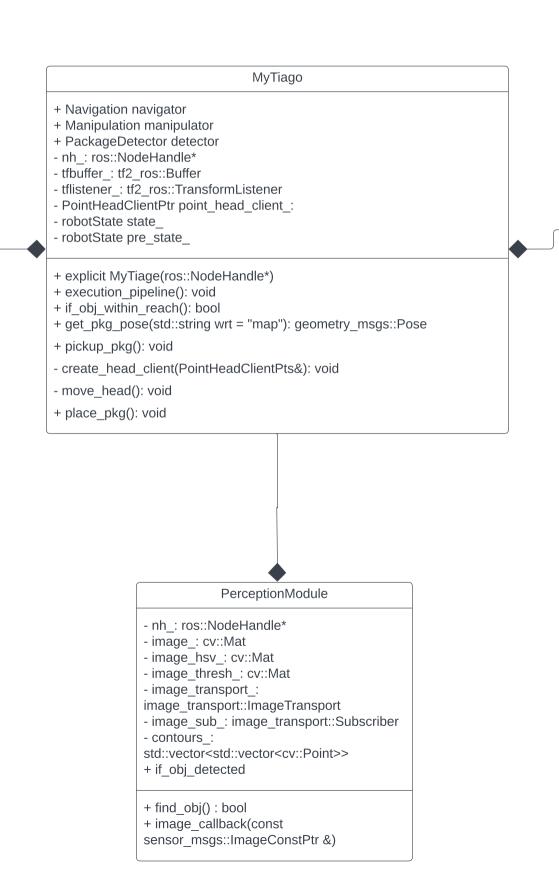
NavigationModule geometry_msgs::point InitialWaypoint geometry_msgs::point FinalWayPoint · nh_: ros::NodeHandle* pre_pose_sub_: ros::Subscriber - goal_pub_: ros::Publisher · vel_pub_: ros::Publisher cancel_goal_pub_: ros::Publisher - kill_costmap_client_: ros::ServiceClient pose_flag_: bool pre-pose: geometry_msgs::Pose goal_pose: geometry_msgs::Pose · drop_loc_: geometry_msgs::Pose · init_quaternion_: tf2::Quaternion - waypoints: std::vector <geometry_msgs::Pose> waypoint_counter_: std::vector <geometry_msgs::Pose>::size_type + set_pkgloc_as_goal(geometry_msgs::Pose): void + set_droploc_as_goal(): void + set_goal(): void + if_goal_reached(): bool + turn_robot(): void + stop_robot(): void + pose_callback(const geometry_msgs::PoseWithCovarianceStamped&): void - set_rot_vel(): void - set_waypoints(): void



Manipulation - nh_: ros::NodeHandle*

- set_obj_state_client_: ros::ServiceClient
- + pick_package(): void
- + place_package(): void
- + move_to_object(geometry_msgs::Pose): void
- reach(geometry_msgs::Pose): void

- seed: unsigned int
- map_range[4]: Int
- nh_: ros::NodeHandle*
- update_state_service: ros::ServiceServer
- spawn_pkg_client: ros::ServiceClient
- pkg_pose_tf_timer_: ros::Timer
- pose_pub_: ros::Publisher
- urdf_string_: std::string
- pkg_pose_: geometry_msgs::Pose
- pkg_name_: std::string
- broadcaster_: tfs_ros::TransformBroadcaster
- tf_buffer_: tf2_ros::Buffer
- tflistener_: tf2_ros::TransformListener
- ifspawned: bool
- + if_picked_up_pkg: bool
- + spawn_pkg(): bool
- + set_pose_of_pkg(geometry_msgs::Pose): void
- set_pkg_state_callback (std_srvs::SetBool::Request&. std_srvs::SetBool::Response&): bool
- publish_pkg_loc(const ros::TimerEvent&): void