My Project

Generated by Doxygen 1.8.11

Contents

1 Class Index **1**

1.1 Class List 1

2 File Index **3**

2.1 File List 3

3 Class Documentation **5**

3.1 decision Class Reference 5

3.1.1 Constructor & Destructor Documentation 5

3.1.1.1 decision() 5

3.1.2 Member Function Documentation 5

3.1.2.1 distancePoints(geometry_msgs::Point pa, geometry_msgs::Point pb) 5

3.1.2.2 goal_to_reachCallback(const geometry_msgs::Point::ConstPtr &g) 6

3.1.2.3 rotation_doneCallback(const std_msgs::Float32::ConstPtr &a) 6

3.1.2.4 translation_doneCallback(const std_msgs::Float32::ConstPtr &r) 6

3.2 moving_persons_detector Class Reference 6

3.2.1 Member Function Documentation 7

3.2.1.1 closest_group() 7

3.3 obstacle_detection Class Reference 7

3.4 robot_moving_lectures Class Reference 8

3.5 rotation_action Class Reference 8

3.6 translation_action Class Reference 8

4 File Documentation **9**

4.1 /home/maxence/robair/src/follow_me/src/decision_node.cpp File Reference 9

4.1.1 Detailed Description 10

Index **11**

Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

decision 5
moving_persons_detector 6
obstacle_detection 7
robot_moving_lectures 8
rotation_action 8
translation_action 8

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

/home/maxence/robair/src/follow_me/src/decision_node.cpp
Noeud de décision 9

Chapter 3

Class Documentation

3.1 decision Class Reference

Public Member Functions

- decision ()
- void update ()

  Met à jour le noeud.
- void **send_finish_move** (bool b)
- void goal_to_reachCallback (const geometry_msgs::Point::ConstPtr &g)

  Callback pour l'inscription au topic goal_to_reach.
- void rotation_doneCallback (const std_msgs::Float32::ConstPtr &a)

  Callback pour l'inscription au rotation_done.
- void **token_Callback** (const std_msgs::Bool::ConstPtr &a)
- void translation_doneCallback (const std_msgs::Float32::ConstPtr &r)

  Callback pour l'inscription au translation_done.
- float distancePoints (geometry_msgs::Point pa, geometry_msgs::Point pb)

  Revoie la distance entre deux points.

3.1.1 Constructor & Destructor Documentation

3.1.1.1 decision::decision ( ) [inline]

Constructeur de la classe Decision

3.1.2 Member Function Documentation

3.1.2.1 decision::distancePoints (geometry_msgs::Point *pa*, geometry_msgs::Point *pb*) [inline]

Revoie la distance entre deux points.

Parameters

pa	le premier point
pb	le second point

Returns

la distance entre le point pa et le point pb

3.1.2.2 decision::goal_to_reachCallback (const geometry_msgs::Point::ConstPtr & *g*) [inline]

Callback pour l'inscription au topic goal_to_reach.

Parameters

g	le point reçu

3.1.2.3 decision::rotation_doneCallback (const std_msgs::Float32::ConstPtr & *a*) [inline]

Callback pour l'inscription au rotation_done.

Parameters

a	l'angle parcouru

3.1.2.4 decision::translation_doneCallback (const std_msgs::Float32::ConstPtr & *r*) [inline]

Callback pour l'inscription au translation_done.

Parameters

r	distance effectuée

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/decision_node.cpp

3.2 moving_persons_detector Class Reference

Public Member Functions

- void **finish_move_Callback** (const std_msgs::Bool::ConstPtr &a)

- void **update** ()
- void **send_goal_to_reach** ()
- void **store_background** ()
- void **detect_motion** ()
- void **perform_clustering** ()
- void **detect_moving_legs** ()
- void **detect_moving_persons** ()
- geometry_msgs::Point closest_group ()

  renvoie le groupe le plus proche du robot
- void **scanCallback** (const sensor_msgs::LaserScan::ConstPtr &scan)
- void **robot_movingCallback** (const std_msgs::Bool::ConstPtr &state)
- float **distancePoints** (geometry_msgs::Point pa, geometry_msgs::Point pb)
- void **populateMarkerReference** ()
- void **populateMarkerTopic** ()
- void **send_token** (bool b)
- void **print_sorce** ()
- void **reset_score** ()
- void detect_group ()

  Recherche les différents groupes.

3.2.1 Member Function Documentation

3.2.1.1 geometry_msgs::Point moving_persons_detector::closest_group ( ) [inline]

renvoie le groupe le plus proche du robot

Returns

le groupe le plus proche

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/moving_persons_detector_node.cpp

3.3 obstacle_detection Class Reference

Public Member Functions

- void **update** ()
- void **scanCallback** (const sensor_msgs::LaserScan::ConstPtr &scan)
- float **distancePoints** (geometry_msgs::Point pa, geometry_msgs::Point pb)
- void **populateMarkerReference** ()
- void **populateMarkerTopic** ()

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/obstacle_detection_node.cpp

3.4 robot_moving_lectures Class Reference

Public Member Functions

- void **odomCallback** (const nav_msgs::Odometry::ConstPtr &o)
- void **update** ()

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/robot_moving_node.cpp

3.5 rotation_action Class Reference

Public Member Functions

- void **update** ()
- void **odomCallback** (const nav_msgs::Odometry::ConstPtr &o)
- void **rotation_to_doCallback** (const std_msgs::Float32::ConstPtr &a)

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/rotation_action_node.cpp

3.6 translation_action Class Reference

Public Member Functions

- void **update** ()
- void **odomCallback** (const nav_msgs::Odometry::ConstPtr &o)
- void **translation_to_doCallback** (const std_msgs::Float32::ConstPtr &r)
- void **closest_obstacleCallback** (const geometry_msgs::Point::ConstPtr &obs)
- float **distancePoints** (geometry_msgs::Point pa, geometry_msgs::Point pb)

The documentation for this class was generated from the following file:

- /home/maxence/robair/src/follow_me/src/translation_action_node.cpp

Chapter 4

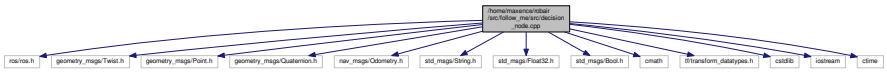
File Documentation

4.1 /home/maxence/robair/src/follow_me/src/decision_node.cpp File Reference

Noeud de décision.

```
#include "ros/ros.h"
#include <geometry_msgs/Twist.h>
#include "geometry_msgs/Point.h"
#include "geometry_msgs/Quaternion.h"
#include "nav_msgs/Odometry.h"
#include "std_msgs/String.h"
#include "std_msgs/Float32.h"
#include "std_msgs/Bool.h"
#include <cmath>
#include <tf/transform_datatypes.h>
#include <cstdlib>
#include <iostream>
#include <ctime>
```

Include dependency graph for decision_node.cpp:



Classes

- class decision

Macros

- #define **duration_sleep** 2

Functions

- int **main** (int argc, char **argv)

4.1.1 Detailed Description

Noeud de décision.

Author

Groupe 7

Index

/home/maxence/robair/src/follow_me/src/decision_↩
node.cpp, 9

closest_group
moving_persons_detector, 7

decision, 5
decision, 5
distancePoints, 5
goal_to_reachCallback, 6
rotation_doneCallback, 6
translation_doneCallback, 6
distancePoints
decision, 5

goal_to_reachCallback
decision, 6

moving_persons_detector, 6
closest_group, 7

obstacle_detection, 7

robot_moving_lectures, 8
rotation_action, 8
rotation_doneCallback
decision, 6

translation_action, 8
translation_doneCallback
decision, 6