

PROGRESS OF WORK

Day	What we did	What we finished	Goals for the next time
March, 12th	<ul style="list-style-type: none"> • package installed : rplidar • decreasing speed of the turtlebot • smooth displacements 	<ul style="list-style-type: none"> • command the turtlebot with the joystics 	<ul style="list-style-type: none"> • create launch files to avoid having lots of terminal windows opened • find a way to avoid obstacles with the turtlebot
March, 19th	<ul style="list-style-type: none"> • creation of packages and launch files for mapping and navigation, on the workstation and on the turtlebot • arbotix : researches about this package 	<ul style="list-style-type: none"> • mapping and navigation of the turtlebot (except obstacle avoidance) 	<ul style="list-style-type: none"> • find a way to avoid obstacles with the turtlebot • find a way to give the arm a scene to execute • make more researches about the arbotix package
March, 26th	<ul style="list-style-type: none"> • creation of a script file ./connect.sh to make an easier connexion between the turtlebot and the workstation • arbotix_gui : allows to test each motor of the arm 		<ul style="list-style-type: none"> • find a way to avoid obstacles with the turtlebot • find a way to give the arm a scene to execute
April, 4th	<ul style="list-style-type: none"> • when the arm is not repoding : move the cables or resourcing • 3 launch files found to give the arm a scenario to execute : creation of a launch file that regroups these 3 launch files • make a copy of the scenario file pick_and_place.py to modify it by keeping the original one 	<ul style="list-style-type: none"> • ask the arm a scene to execute 	<ul style="list-style-type: none"> • find a way to avoid obstacles with the turtlebot • modify the scene to reproduce the scenario of our project

April, 23rd	<ul style="list-style-type: none"> • teachers changed cables of our robot arm, it works better now • modifications on the scene, problem : the arm does place the cube after picking it • solving problems of execution time with rqt_reconfigure • navigation parameters modified : turtlebot now avoids obstacles 	<ul style="list-style-type: none"> • mapping and navigation of the turtlebot (with obstacle avoidance) 	<ul style="list-style-type: none"> • solve the problem of placing the cube : why the arm does not place the cube, whatever the given position ?
April, 24th	<ul style="list-style-type: none"> • the cube's size must be between 0.03 and 0.07 to make the arm places the cube. We have a cube of 0.18, too big <p>HYPOTESIS : it might be the threshold in the library ???</p>		<ul style="list-style-type: none"> • ask the teachers about the cube's size problem • see if we can implement the coordinates of the table in the navigation.launch to let the turtlebot going there alone, only by launching the file navigation
May, 2nd	<ul style="list-style-type: none"> • we cut the cube to obtain a smaller one 	<ul style="list-style-type: none"> • the entire part with the arm 	