Building A Manufacturing Robot Software System (ENPM809B)

Assignment 2

Group 4

Coordinate Frames

February 26, 2020

Contents

0.1 Introduction and Objective

0.1.1 Introduction

Addition of sensor/camera in the ROS ariac environment.Moreover,creating a ROS node that output sensor/camera information on console using tf_2 package.

0.1.2 Objective

The main aim of the assignment are:

1. Create a package for competition with all the necessary sub-directories and required files .
2. Adding a sensor to the provided ROS environment.
3. Developing a ROS program to provide sensor information received on the screen.

0.2 Instruction for running package

Build Instructions

mkdir -p ∼ /*catkin_ws*/*src*
cd ∼ /*catkin_ws*/
catkin_make
source devel/*setup.bash*
cd src/
*copy group*4*_rwa*1*package here*
cd..
catkin_make

Running the code

Instructions for running package: Open a new terminal
cd ∼/catkin_ws
source devel/setup.bash
roslaunch group4_rwa1 group4_rwa1.launch
Open a new terminal
cd ∼/catkin_ws

source devel/setup.bash
rosrun group4_rwa1 ariac_example_node

0.3 Outputs

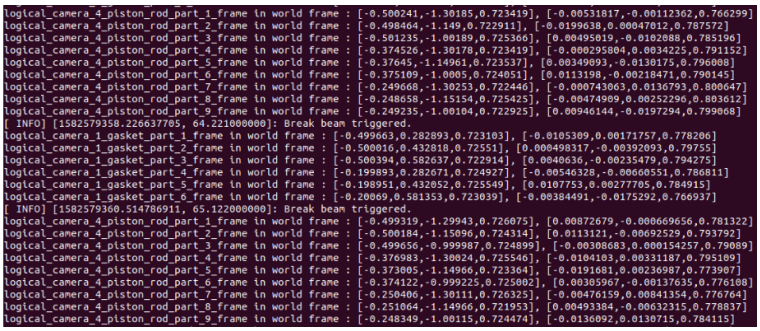

Figure 1: Parts in world co-ordinate

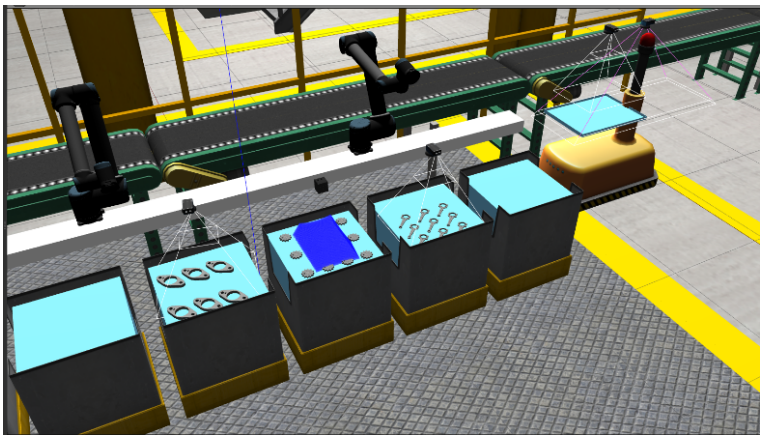

Figure 2: Logical camera on bin 3