EECS376/476 Ps2 Report

This assignment acquires an update in the robot lidar alarm from reading a single ping in the front to reading a range of laser scan in the front.

The reactive commander hears (subscribes) from the alarm_msg which will give the information whether the lidar thinks it see an obstacle or not. Since the commander did spin (change travel plan / avoid obstacle) when the alarm is on and keep moving when alarm is off, no need in changing the commander. Keep using the commander from Dr. Newman's learning_ros.

From the lidar_alarm, found that laser scan information of obstacle distances are stored in the array laser_scan.ranges[i]. Write a for loop which examines a larger range of laser scan distance information and compares them with safety distance MIN_SAFE_DISTANCE. Once a danger is found (the checked distance is larger than the safety distance), break the loop and ring the alarm so the robot will spin until the alarm is off again.

Git hub link:
https://github.com/chenhuiyang1994/EECS376_ps2

Video link:
https://www.youtube.com/watch?v=6CtOTbbGHXw&list=PL1WxStBxgFL-uERja547HstCQPLWaUIl2&index=2