This lab builds on PS4.

Write an action server/action client pair to achieve the following:

The action client sends a Path goal to the action server

the action server attempts to complete the goal.

If the lidar-alarm goes true, the action server should SUSPEND its execution (bringing the robot to a halt).

When the lidar-alarm goes false again, the action server should resume execution of its current goal.

You should observe this behavior: the robot moves according to the goal message. When a person walks into its path, the robot halts and waits. When the person walks away, the robot resumes executing the rest of the Path.

Submit a pointer to your code on github;

submit a link to a movie showing your robot suspending motion when a human walks in the way, and resuming motion when the human leaves.

Submit a brief report describing the theory of operation of your code (ideally, with graphical representations of your logic, e.g. nodes and topics). Include your observations (anything unexpected?)