In this assignment, you will design an action server and action client for reactive mobile-robot control.

Use the STDR simulator for this assignment.

start your lidar alarm node (built previously)

start your action server (to be designed)

start your action client (to be designed)

your action server should send commands to: robot0/cmd_vel

your lidar alarm should listen to the LIDAR topic: /robot0/laser_0

your action client should send multi-pose path commands to the action server

your action client should listen to the lidar alarm The behavior should be:

action server: accepts and executes path commands, provides feedback, halts robot upon goal completion or cancellation

action client: sends multi-step goals to action server (e.g. to move through the maze)

monitors lidar alarm:

if alarm, halts robot (cancels current goal), sends goal to rotate some amount

resends a multi-step path goal

submit: report describing your solution approach; movie of your result; zipped up package with action server and action client code (or link to your code on github)