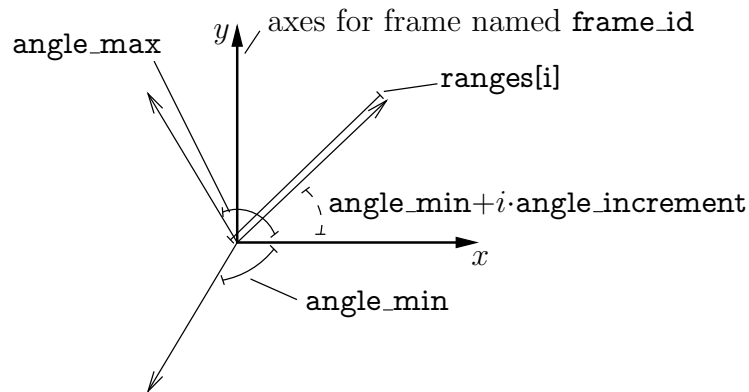

CSCE574 – Robotics
Spring 2014 – Notes on sensor_msgs/LaserScan

For Project 2, you'll be processing data captured by a laser range finder, represented as messages of type `sensor_msgs/LaserScan`. This data type is a bit more complicated than some others, so here's a diagram that might help you sort things out.



Note that this is a two-dimensional diagram. Perhaps the most important thing to catch is that the sensor is at the origin in frame `frame_id`, facing along the positive x -axis. The given ranges represent the measured distance to the nearest obstacle, in directions spaced evenly between `angle_min` and `angle_max`. To compute the Cartesian coordinates of these obstacles, you can use the usual trigonometric functions.