

Assignment IV

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Identify any of the following things and make a document about their functionality and importance

-Navigation messages, Geometry Messages, and sensor messages

Navigation Messages

Nav_msgs is message type which helps robots for navigation, generally navigation messages are for moving robots, which is very useful. A type of message under navigation messages is Path which contains a header and the next pose kind of like linked lists concept which help the robot follow a path represented with help of arrays.

Geometry Messages

Geometry_msgs is one of the common messages used by all robots as it contains the geometric pointer, vectors, and poses, each of which is highly needed by any kind of robot. Either for moving a hand or moving the bot itself. One of the known types of geometry message is Twist, with a Vector3 for linear velocity and Vector3 for angular velocity.

Sensor Messages

Sensor_msgs are especially important because lot of robot has sensors, and to communicate from sensors these types of messages become crucial as these send the data receive by the sensors. One of the known types of messages is used point cloud which contains data of 3D point clouds.