



PROJECT SPECIFICATION

Map My World Robot**Basic Requirements**

CRITERIA	MEETS SPECIFICATIONS
Did the student submit all required files?	Student submitted all required files: ROS Package: robot and RTABMAP Db file generated (could be link to file if oversized)

Simulation Setup

CRITERIA	MEETS SPECIFICATIONS
Did the student set up the simulation environment properly?	Student's simulation world and robot could properly load in Gazebo.

CRITERIA	MEETS SPECIFICATIONS
Is the student's simulation suitable for mapping task?	The student's environment should have clear features and geometric shapes to perform mapping.

Mapping Package

CRITERIA	MEETS SPECIFICATIONS
Does the student correctly build all required launch files for RTAB-Mapping?	<p>Student created the following launch files properly:</p> <pre>mapping.launch</pre> <pre>teleop.launch</pre> <pre>localization.launch</pre> <p>The student's program should be able to launch without errors</p>

Mapping Accuracy

CRITERIA	MEETS SPECIFICATIONS
Was the student able to generate a 3D map using RTAB-Map?	Student's map should contain at least 3 loop closures and the occupancy grid is identifiable

CRITERIA	MEETS SPECIFICATIONS
Does the student's 3D map portray environment characteristics?	Student's map should clearly portray the environment. The student should be able to display the characteristics of the landmark features.

Suggestions to Make Your Project Stand Out!

Try building different simulation environments and evaluate the performance between them! Also, document your work on SLAM, which will contribute towards the final Home Service Robot project!