Criteria	Concept	RTAB-Map	Gmapping	ORB-SLAM		
	Description	Graph-Based SLAM approach based on an incremental appearance-based loop closure detector	Rao-Blackwellized particle filter	feature-based SLAM, sparse 3D reconstruction		https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8710464
	Method	feature	laser	feature		https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8806213
	Inputs required	RGBD/Stereo image OR 2D laser scan, odometry	2D laser scan, odometry	RGB image, OR RGBD/Stereo/Point cloud		
	Sensors required	Lidar/Stereo/RGBD camera, IMU+encoders	Lidar/Stereo/RGBD camera, IMU+encoders	Monocular Camera, OR Lidar/Stereo/RGBD camera		
	Output	2D Occupancy grid/Dense point cloud	2D Occupancy grid	Sparse point cloud		
Criteria	Weight factor (100%)		Value (1-5)			
Performance Requirements						
Robustness to different environments	20	4.5	4	4		
Map accuracy	25	4.5	4	5		
Localization accuracy	20	5	4	4.5		
Handles scale ambiguity	5	5	5	2		
Ease to use and integrate into system	10	5	5	4		
Non-performance Requirements						
Sensor attainability	15	3.5	3.5	5		
CPU usage	5	5	5	5		
Weighted Average	100	**4.55**	**4.125**	**4.45**		