

Progress Report - Group 8

Robotics (E019370A) – A Minesweeping Robot

Week 1: 16/11/2020 – 23/11/2020

Below a small progress update can be found of group 8 concerning the minesweeping robot project of the 'Robotics 2020-2021' course. The left column describes what has been done during the last week, the right column describes what is planned as next steps with the focus on next week.

What has been done? What is planned for week 2? General General Interpreting assignment and identifying Follow-up on subtasks and integrating subtasks (Together) them (Together) o Team meeting on 16/11/2020, Team meeting on 27/11/2020, 20/11/2020 and 23/11/2020 30/11/2020 Writing progress report week 1 (Lauren) Writing progress report week 2 (Lauren) Setting up GitHub (Lauren and Flor) Writing report: Introduction (Lauren) Setting up Overleaf (LaTeX) for report Simulation writing (Lauren) Building an - extendable - test Simulation environment with walls and obstacles for Exploring general possibilities Gazebo the Turtlebot (Lauren) Building a first world and interacting Distributing mines in test environment with existing Turtlebot program (Lander and Lauren) (Lander and Lauren) Further exploring possibilities for Exploring possibilities for communication communication between Gazebo and ROS between Gazebo and ROS (Lander) (Lander) Robot Algorithms Robot Algorithms Exploring ROS basics for own ROS Implementing SLAM for map building (Flor) development (Flor, Lander and Henrique) Extending ROS package with first sweeping • Writing basic - extendable - ROS package strategies (Henrique) for simple robot operations. (Flor and Lander) **Evaluating Strategies Evaluating Strategies**