AMR SS2023 BDD Scenarios

MS 1 - Assemble robile, joypad control

US 1.1

As a *system builder* **I want** the joypad control software to work for different hardware configurations of the Robile **So that** the maintainence of the software is simplified

Scenario 1.1.1

Given a robot assembled in config and is initialized **When** signal is sent via the joypad **Then** the robot moves

Examples: | configuration | command | motion | | 1 driving wheel | left stick up fully + right trigger | forward at most 1m/s | | 1 driving wheel | left stick left fully + right trigger | left at 1m/s | | 2 driving wheel | left stick left fully + right trigger | left at 1m/s |

MS 2 - Collision avoidance

US 2.1

As a *safety engineer* **I want** the robot not to run into static or dynamic obstacles **So that** injuries to human and damages to the environment and the robot can be avoided

Scenario 2.1.1 - static obstacles

Given the robot is moving **When** is in the robot path **Then** the robot goes around the (or stops)

Examples: | location | obstacle | | in the kitchen | chair | | through door | vacumm cleaner |

Scenario 2.1.2 - dynamic obstacles

Given the robot is moving **When** a moves through the robot path **Then** the robot does not collide with the

Examples: | location | agent | | in straight corridor | person | | through door | robile |