Weekly Report 3

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1 Scenarios

1.1 Scenarios with Subscenarios

Table 1: Sense-Plan-Act Scenarios

Scenario Name	Sub Scenario	Description
LidarCrash$_1$	Lidar Node dies while stationary	Crash of the Lidar node.
LidarCrash$_2$	Lidar Node dies while driving straight	Crash of the Lidar node.
LidarCrash$_3$	Lidar Node dies while driving around a corner	Crash of the Lidar node.
OdomCrash$_1$	Odometry Node dies while standing	Crash of the Odometry.
OdomCrash$_2$	Odometry Node dies while driving	Crash of the Odometry.
IMUCrash$_1$	Odometry Node dies while standing	Crash of the IMU Driver.
IMUCrash$_2$	Odometry Node dies while driving	Crash of the IMU Driver.
NoPathFound$_1$	No valid global path can be found	Path can not be calculated
NoPathFound$_2$	Global Planner Node crashed.	No response from Path Plan
ForcedCollision$_1$	Obstacle crashes into robot	The robot is following its path and something els
ForcedCollision$_2$	The robot crashes into undetected obstacle	The robot is following its path crash
BatteryLow$_1$	Battery Voltage Low	The remaining battery is too low to reach
MotorFailure$_1$	The motor driver fails.	The motor has a hardware fai
NetworkFailure$_1$	The robot can not receive any commands.	The method to transmit the motor com

2 Next Week