

Type		Requirement	Rationale	Traced from	MoSCoW
Interface	1.1	Communicate with the PW in real time	The communication will allow control of the motors of the PW which is needed for user control or self driving	Scenario 1	Must
	1.2	Communicate with user's interfacing device in real time	This allows the user to send commands to control the PW	Scenario 1 and stakeholder needs	Must
Safety	2.1	Implement a safety mechanism to detect errors	If a component disconnects or fails to start then it can cause a disaster	Scenario 3	Could
	2.2	Notify caretaker in case of emergency situation (e.g. system failure or accident)	The caretaker can be informed during emergencies so they can take control	Stakeholder needs	Won't
	2.3	Implement real-time obstacle detection	Serves as an additional safety net in case of manual operation but can be integrated with autonomous behaviour	Scenario 3	Should
Operational	3.1	Support 2 operational modes	This allows for customization based on the user's specific requirements	Scenario 1 and 2 and stakeholder needs	Could
	3.2	Support 2 different user inputs	Should allow both the user and the caretaker to control the PW which may be different inputs. Also allows for customization	Scenario 1 and 2 and stakeholder needs	Could
Maintainance	4.1	Provide documentation for developed system	Aids in the development and maintainence of the system	Scenario 4	Should
Testing	5.1	Measure the performance of the developed prototype	This will help in refining the constraints and requirements further	Project Objectives	Must