1 Requirements

The requirements are split into functional and non-functional requirements, where the former are definitions of what a system is supposed to do and the latter are requirments describe how the system is supposed to be. The criteria for the non-functional requirements are shown in

In contrast to many consumer facing technologies usability is not included in the requirements.

Non-functional requirements

Area	ID	Name	Description
Reliability	100	Downtime	The downtime due needs to be less once per month.
	101	Recording failures	Less than 5 percent incorrect readings.
Robustness	200	Interference	The system should be able to deal with at least 10 bluetooth enabled devices nearby.
	201	Transmission failures	There should not be more 0.01 percent of transmission failures, including all reasons.
	203	Incorrect data	There should not be more 0.0001 percent of wrong data transmission.
	202	Crashes	In case of a crash, the software must be able to recover automatically.
Portability	300	Supported platforms	The application needs to supported on a wide variety of IoT devices for future changes.
Maintainability	400	Updates	The software needs to be updatable over the air (OTA).
	401	Centralization	As long as a table is connected to the Internet (also indirectly through the raspberry pi), all updates must be available through a central point.
	402	Bug fixes	All bugs need to be addressed latest 6 months after discovery
Efficiency	500	Battery life	The system needs to able to life on a single battery charge for at least two weeks with no more than 20 games per day.
	501	Battery replacement	The battery needs to be able to charge to above 80 percent of its original value after 2 years, with 25 recharges a year.