Supplementary Requirements Documentation

Smart home Devices

Revision History

Date	Version	Description	Author
2026-02-06	1.0	Initial revision	Sergej Macut
2026-02-26	1.1	Revised	Sergej Macut

Supplementary Requirements List

Supplementary Requirement Name	Priority
S1. Interoperability - Middleman Architecture	Essential
S2.. Performance - Response Latency	Desirable
S3. Reliability - Simulation Stability	Essential
S4. Design Language - UML Standards	Essential

Supplementary Requirements Descriptions

S1. Interoperability - Middleman Architecture
Devices must not interact with user units directly but instead communicate through an application acting as a middleman. This middleman is responsible for maintaining a constant connection to the server to relay all observation and control data.

S2. Performance - Response Latency
The device state must update within the system quickly enough to support fluid human-controlled activities from a mobile or web interface. Any physical hardware must process incoming server commands without noticeable delay to ensure a responsive user experience.

S3. Reliability - Simulation Stability
Devices must be capable of running continuously on Arduino without crashing. The software must maintain a consistent state even when multiple communicating units are observing the device simultaneously through the server.

S4. Design Language - UML Standards
The device architecture must be modeled using standardized UML diagrams to ensure technical clarity across all project subgroups. This includes the use of class diagrams for structure and interaction sequence diagrams to map how devices talk to the server.