

# **Requirements Documentation**

## **Interactive House**

### **Revision History**

| Date       | Version | Description                     | Author       |
|------------|---------|---------------------------------|--------------|
| 2026-02-04 | 1.0     | Initial functional requirements | Md Abu Taher |
|            |         |                                 |              |
|            |         |                                 |              |
|            |         |                                 |              |

# Requirements List

| Requirement Name                           | Priority  |
|--------------------------------------------|-----------|
| R1. Create automation rule                 | Essential |
| R2. Edit automation rule                   | Essential |
| R3. Delete automation rule                 | Essential |
| R4. Execute automation rule automatically  | Essential |
| R5. Validate automation rule configuration | Essential |
| R6. View list of automation rules          | Desirable |
| R7. Enable and disable automation rules    | Desirable |
| R8. View automation rule execution history | Optional  |

## Requirements Descriptions

### **R1 – Create automation rule**

The system shall allow users to create automation rules that specify a target device, an action to be executed, and a trigger condition based on time.

### **R2 – Edit automation rule**

The system allows users to modify existing automation rules, including changes to the trigger condition, target device, or action.

### **R3 – Delete automation rule**

The system shall allow users to permanently remove automation rules so that they are no longer evaluated or executed by the system.

### **R4 – Execute automation rule automatically**

The system shall automatically execute an automation rule when its trigger condition is fulfilled, without requiring any additional user interaction.

### **R5 – Validate automation rule configuration**

The system shall validate automation rule configurations before saving to ensure that all required information is present and logically correct.

## **R6 – View list of automation rules**

The system shall provide users with an overview of all existing automation rules and their current status.

## **R7 – Enable and disable automation rules**

The system shall allow users to temporarily enable or disable automation rules without deleting them.

## **R8 – View automation rule execution history**

The system shall allow users to view historical execution information for automation rules, including timestamps and execution outcomes.