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| **Specification of the Product:**  Functional Requirements — Part A: Control Specification   |  |  |  | | --- | --- | --- | | **Requirement ID** | **Description** | **MoSCoW** | | **A1** | **An interface to allow users active interaction with IoT server.** |  | | A1-1 | Users will be able to login/logout to their dashboard. | M | | A1-2 | Users will be able to manipulate status (On/Off) of their GPIO (General Pin Input/Output) for digital devices. | M | | **A2** | **An interface to allow users to match their ergonomics.** |  | | A2-1 | Users will be able to schedule uptime of their appliances. | S | | A2-2 | Users will be able to pick a dynamic range of RGB (Red, Green, Blue) channeled colours as per their need for lighting purpose. | S | | **A3** | **An interface to allow users active surveillance and security.** |  | | A3-1 | Users will be emailed a potential fire hazard caused by inflammable gas leakage. | C | | A3-2 | Stream real-time video | W | | A3-3 | Burglary email notification with attached photo email | C |   Nonfunctional Requirements — Part B: Configurability Specification   |  |  |  | | --- | --- | --- | | **B1** | **An interface to allow controlled devices extensibility and scalability.** |  | | B1-1 | Users will be able to translate and map digital and analog values to control integrated electromechanical devices like a servo. | M | | B1-2 | Users will be able to control higher electrical loads using relay. | S | | B1-3 | Users will be able to view and interact with real-time sensor data collected from an array of sensors including temperature, pressure, and altitude sensors. | M | | B1-4 | Users will be able to set device status based on sensor threshold value using PIR motion sensor. | S | |