|  |  |  |  |
| --- | --- | --- | --- |
| *Version* | *Date* | *Author* | *Description of change* |
| 1 | 29/10/2022 | Abir Sikder | Create Use Case |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| Header |

## 

|  |  |
| --- | --- |
| Use Case: | Open window and activate fan if co2 > 1000ppm |
| ID: | UC-021 |
| Description: | For air quality reasons, the window will be opened and the fan will be activated if the co2 values are above 1000 parts per million. |
| Actors: | sensor (sends data) |
| Stakeholders and Interests: |  |
| Trigger | If the room is empty the light will be turned off. |

|  |
| --- |
| **Pre-Conditions** |

Co2 values are < 1000 ppm, windows are closed, and the fan is deactivated.

|  |
| --- |
| **Post-Conditions** |

The co2 values are > 1000 ppm, windows are opened, and the fan is activated.

|  |
| --- |
| **Success end condition** |

The co2 values are > 1000 ppm, windows are opened, and the fan is activated.

|  |
| --- |
| **Failure end condition:** |

Invalid data entry. (Cannot be interpreted)

|  |
| --- |
| **Main Success Scenario:** |

1. Sensor sends data to database.
2. If the co2 values are > 1000 ppm, the windows will be opened, and the fan will be activated.

|  |
| --- |
| **Alternative Flow and Exceptions:** |

3a. If the co2 values are < 1000 ppm, the windows will be closed, and the fan will be deactivated.

|  |
| --- |
| **Non-Functional Requirements:** |

**Performance**

The windows should be opened within 5 seconds.

The fans should be activated within 3 seconds.

**User** **Interface**

The user will be notified in the info box if the windows are opened.

The user will be notified in the info box if the fans are activated.

The notification should be easy to read at the info window.