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

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

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| **Pre-Conditions** |

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

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| **Post-Conditions** |

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

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| **Success end condition** |

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

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| **Failure end condition:** |

Invalid data entry. (Cannot be interpreted)

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| **Main Success Scenario:** |

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

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| **Alternative Flow and Exceptions:** |

3a. If the co2 values are < 1000 ppm, the window and the fan states will remain unchanged.

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| **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.