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| **ID** | **Risk** | **Risk Description** | **Likelihood** | **Impact** | **Severity** | **Owner** | **Mitigation** | **Status** |
| 1. | Device Error | Devices like sensors, LCD and NodeMCU may not fail during operations. | Medium | High | High | Nipesh Khanal | Test frequently, keep replacement parts in good condition, and make sure everything is handled correctly throughout setup and use. | Open |
| 2. | Problems with Wi-Fi Connectivity | Disturbance in Wi-Fi connection may affect the transfer of data to the app. | Medium | Medium | Medium | Nipesh Khanal | Focusing on proper internet connection or using mobile data | Open |
| 3. | Electrical Outage or Disruption | Power supply outages may result to failure of system. | Low | High | Medium | Nipesh Khanal | Using battery pack or backup USA power supply | Open |
| 4. | Problems with Sensor Adjustment | Sensor may give inaccurate data measurement | Medium | High | Medium | Nipesh Khanal | Regular adjust sensor and check data regularly | Open |
| 5. | Software error | Programming code may lead to wrong data processing. | Medium | High | High | Nipesh Khanal | Regular testing code and debugging. | Open |
| 6. | Environmental Interference | Environmental factors like heavy rain or dust might affect sensor performance. | Low | Medium | Medium | Nipesh Khanal | save sensors with enclosures to minimize interference from difficult conditions. | Open |
| 7. | |  | | --- | |  |   Component Compatibility | Some hardware components may not work well together, leading to integration issues. | Low | Medium | Medium | Nipesh Khanal | Verify compatibility during the selection of components. | Open |
| 8. | Overheating of Components | Continuous operation may lead to overheat of hardware. | Low | Medium | Medium | Nipesh Khanal | Monitor hardware temperature and provide adequate ventilation or heat dissipation mechanisms. | Open |
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**Notes:**

ID values may be useful to refer back to in your final documentation. Number these in order. This register should be included in the appendix

Risk description provides an outline of the issue

Please use Low, Medium and High to identify the risk level and color code.

Typically, the owner will be you, but it may be the case in teamwork or other projects that have external clients, other activities may impact on the project

Mitigation implies on how you will manage the risk and to reduce the likelihood of it occurring.

Status – has the risk event now passed. It should indicate an Open and Closed status.