ID	Potential Risk	Description	Probability (Up to 5)	Impact (Up to 5)	Owner	Mitigation Action (how to reduce)	Contingency Action (if happened, what action to take)
1	IoT Hardware Issue	BeagleBone hardware is not functioning, including circuit boards, power input, cable connection issue, buttons and LEDs.	3	5		Test the device on a regular basis.	Prepare a second functioning device as backup.
2	Cloud Server Not Responding	The server is overloaded or malfunction due to DDoS.	2	5		Configure anti-DDoS attack for cloud server.	Have a local server / second cloud server by a different provider.
3	Security Issue	Hardware being hijacked by third party.	3	5		Organise bug bounty programme. Send to third-party security consultation.	Contact third-party security consultation.
4	Natural Disaster	Natural disaster such as earthquake and tsunami that cause physical damage	1	4		Constantly backup the data on separate server.	Restore the data from the database backup.
5	Team member is not available (Developer Downtime)	Sickness, team member mia Team member is not available due to sickness or other personal issue.	2	3		Prepare regular health screening for the team member. Proper communication with team members to avoid sudden absence from work.	Search for substitute team member.

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6	Power Failure	Power outage.	3	3		Automate power generator to back up the power. Prepare uninterruptible power supply (UPS).	Make use of the uninterruptible power supply (UPS) or the power generator.
7	Unrealistic customer expectation	Unable to fulfil the increasing demands and expectations from customers as the project progresses in an Agile environment.	4	5		Ensure communication is clear for both parties and always keep the customer informed.	Discuss with customers and prioritize to ensure the expectations are achieved.
8	Library Issue	Library is not being supported anymore.	2	3		Use more popular and more established libraries. Have regular checkup to verify libraries' support and compatibility to our product/system. Minimise the use of third party libraries.	Search for other libraries for substitution.