Project Design Phase-I

Proposed Solution Template

Hazardous Area Monitoring For Industrial Plant

Powered By IoT

Proposed Solution Template:

S.NO.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To monitor and alert the workers working in the industrial area about the risk of toxic and hazardous gas present thus ensuring their safety.
2.	Idea/ Solution description	- Providing every worker with a wearable intelligent beacon device capable of collecting and displaying the surrounding data. - An alert message is also sent to the worker's mobile in case of high temperature or the presence of toxic gases as SMS through an API. - Providing safety to the workers.
3.	Novelty/ Uniqueness	- Easier to detect the temperature or the presence of toxic gases without manual labor. - Provides safety for the workers. - The wearable device displays the current temperature like a Real-time system. - Alerts are provided to both wearable devices and also mobile applications as SMS.
4.	Social Impact/ Customer Satisfaction	- Simple and Reliable - User-Friendly - Comfortable - Ensures safety of the workers - Additional support and functions can be added in the future. - Necessary updates are given for better functioning of the device.

5.	Business Model (Revenue Model)	- The wearable device can be sold by the industry to workers for profit. - The data stored in the cloud can be sold to big MNCs like Google to seek profit. - Pop-up advertisements can be hosted in mobile applications to gain extra revenue. - After the end of the life of the wearable device, it can be scraped for additional revenue.
6.	Scalability of the Solution	- Most of the workers can be supplied with a wearable device. - Multiple users can receive the alert message simultaneously in case of an emergency. - The alert message is sent to both the wearable device and mobile phone to alert all the workers in that particular area - With the use of SMS, all the workers are alerted in no time in case of emergency. - It ensures the safety of each and every worker with additional revenue gain in hand. - The sensors in beacon devices are designed in such a way as to cover a large part of the area for sensing.