**Project Design Phase-I Solution Architecture**

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| Team ID | PNT2022TMID26841 |
| Project Name | Hazardous Area Monitoring For industrial plant  Powered by IOT |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

* To monitor the condition, we can integrate the smart device in the area which are needed to be monitored every device will be acting as a beacon and it is connected to temperature and gas sensors**.**
* In this project, we create an IoT-based hazards monitoring system specifically suited to the requirements of mining, refining, manufacturing and chemical industries.
* The system actively records, processes and analyzes the temperature of the surroundings, which is a prime safety parameter in areas where molten metal is processed, manufacturing is done or welds are made. if a parameter is violated, the system sends an immediate notification to a set of a preset list of users on their smartphone and continues logging and monitoring data for further analysis to suggest improvements in the safety regulation of the industry.
* Broadcast the temperature and gas leakage data along with the location of that particular area through beacons. The persons who generally monitor these places will be given a wrist band and cell phones by alerting the call and SMS.
* Whenever the person enters the desired area then he can view the required parameters and can be alerted, these are sent to the cloud storage.

**Solution Architecture**

