

PROJECT DESIGN PHASE-II
SOLUTION REQUIREMENTS
(Functional & Non-Functional)

**HAZARDOUS AREA MONITORING FOR INDUSTRIAL
PLANT POWERED BY IOT**

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FUNCTIONAL REQUIREMENTS:

Following are functional requirements of the proposed solution

| FR NO | FUNCTIONAL REQUIREMENT (Epic) | SUB REQUIREMENT (Story/Sub-Task) |
|-------|-------------------------------------|---|
| FR-1 | Registration | Registration of the user using their credentials |
| FR-2 | Confirmation | Confirmation of the details using the verification link |
| FR-3 | User guidelines | General guidelines for the user useful for the process initialization |
| FR-4 | Sensing parameters | The smart beacon devices must be able to sense the parameters of the area |
| FR-5 | Location Identification | The smart devices must be able to detect the location of the workers in the area precisely. |

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|------|---------------------------|---|
| FR-6 | Displaying of data | The wearable display should display the temperature of the working area to the concerned workers |
| FR-7 | SMS Intimation | If the observed data for an area is found to be risky for the workers then they shall be notified via SMS |
| FR-8 | Data Sync | The data has to be shared and synced to both the workers and the admin through cloud |
| FR-9 | Admin | The admin should be informed about the alert through the dashboard presented to him |

NON-FUNCTIONAL REQUIREMENTS:

Following are non-functional requirement of the proposed solution

| NFR NO | NON FUNCTIONAL REQUIREMENTS | DESCRIPTION |
|--------|-----------------------------|--|
| NFR-1 | Versatility | The device has to be comfortable to wear and the sensors should sense and intimate the people promptly |
| NFR-2 | Dependability | The device should function properly for a predetermined lifetime and should notify people in case of any fault |

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|-------|----------------------|--|
| NFR-3 | Security | The data that is shared and stored in the cloud should be secured from various attacks and malwares. |
| NFR-4 | Productivity | The sensitivity of the products should be optimal and should update data spontaneously |
| NFR-5 | Accessibility | The system should meet all possible demands of the user with ease of access for better functioning of the system |
| NFR-6 | Adaptability | The product should entertain easy modification of the system if required as per user demands |