HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANTS POWERED BY IOT

**SUBMITTED BY TEAM ID: PNT2022TMID16791**

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BACHELOR OF TECHNOLOGY –INFORMATION

TECHNOLOGY

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional**  **Requirement (Epic)** | **Sub Requirement (Story / Sub- Task)** |
| FR-1 | Temperature sensors | To detect the temperature of a particular area. |
| FR-2 | Beacons | To broadcast the data. |
| FR-3 | Smart wearables | To notify the workers about the temperature. |
| FR-4 | Alarm | To alert the workers in nearby areas. |
| FR-5 | Mobile App | To alert the workers if the temperature goes beyond the limit. |
| FR-6 | Cloud Storage | To store and access the data. |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Availability of user-friendly wearable devices. |
| NFR-2 | **Security** | It will be safe for the workers by  installing the devices in the industry |
| NFR-3 | **Reliability** | Data are saved in the secured server so they don’t provide any  loopholes for the hackers |
| NFR-4 | **Performance** | No server crash or server down |
| NFR-5 | **Availability** | Information is available through  wearable devices and mobile application |
| NFR-6 | **Scalability** | Easily accessible with high reliability |