

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	03 October 2022
Team ID	PNT2022TMID00314
Project Name	Natural disaster intensity analysis and classification using Artificial Intelligence
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registering via Google Accounts and Registering via Product's own user management system
FR-2	User Authentication	Verification through OTP and Verification through Email Link
FR-3	Designation of Region	Ease of selection of necessary areas to be monitored and Versatile and Flexible operations on designated areas
FR-4	Analysis of Required Phenomenon	Simple and easy analysis on the specific phenomenon to be observed
FR-5	Organizing Unstructured data	Processing of raw and clustered data into clear and refined data which is useful for analysis and prediction tasks
FR-6	Algorithm selection	The freedom to choose from several classes of algorithm to be used in the process and Customization of algorithm to suit the needs of a specific purpose
FR-7	Prediction and analysis of data	Accurate results of the analysis provided by the process and Advanced visualization techniques to help visualize the processed data for effective observation
FR-8	Report generation	Restructuring of obtained results into clear and detailed report for future studies

### **Non-functional Requirements:**

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

<b>FR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	<b>Usability</b>	User friendly and classify the disaster easily
NFR-2	<b>Security</b>	It provides a distinct and secure encryption layer to the system interface for additional security standards.
NFR-3	<b>Reliability</b>	The product is robust and is capable of execution of processes even in the most difficult and unpredictable environments.
NFR-4	<b>Performance</b>	The product boasts a high precision and efficient working capacity which helps in escalating its performance to the highest degree
NFR-5	<b>Availability</b>	Despite the complexity and degree of difficulty in its operation, the product is equipped with all-round maintenance and readily available technical services which provides the necessary support any individual requires in their duties
NFR-6	<b>Scalability</b>	The product also possess enough room for the improvement of its specifications to upgrade its capabilities according to the needs of the user and their organization

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