

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

Date	03 October 2022
Team ID	PNT2022TMID26880
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.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User friendly and classify the disaster easily
NFR-2	Security	It provides a distinct and secure encryption layer to the system interface for additional security standards.
NFR-3	Reliability	The product is robust and is capable of execution of processes even in the most difficult and unpredictable environments.
NFR-4	Performance	The product boasts a high precision and efficient working capacity which helps in escalating its performance to the highest degree
NFR-5	Availability	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	Scalability	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