<u>Project Design Phase-II</u> <u>Solution Requirements (Functional & Non-functional)</u>

Date	11 October 2022
Team ID	PNT2022TMID47240
Project Name	Natural Disaster Intensity Analysis and Classification using Artificial Intelligence
Maximum Marks	4 Marks

<u>Functional Requirements</u>:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-I	User Registration	Registering via Google Accounts Registering via Product's own user management system
	User Authentication	Verification through OTP Verification through Email Link

FR-3	Designation of Region	Ease of selection of necessary areas to be monitored Versatile and Flexible operations on designated areas
	Analysis of Required Phenomenon	Simple and easy analysis on the specific phenomenon to be observed
FR-5	Accumulation of required Data	Fast and Efficient data gathering capabilities regarding past event analysis and future prediction
FR -6	Organizing Unstructured data	Processing of raw and clustered data into clear and refined data which is useful for analysis and prediction tasks
	Algorithm selection	The freedom to choose from several classes of algorithm to be used in the process Customization of algorithm to suit the needs of a specific purpose
FR-8	Prediction and analysis of data	Accurate results of the analysis provided by the process Advanced visualization techniques to help visualize the processed data for effective observation
FR -9	Report generation	Restructuring of obtained results into clear and detailed report for future studies

NFR No.	Non-Functional Requirement	Description
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NFR_I	Usability	It is well suited for fields requiring diverse application of processes with efficiency, precision and ease.
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Non-functional Requirements :

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

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