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

Date	**27 October 2022**
Team ID	**PNT2022TMID37583**
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 • Registering via Product's own user management system
FR - 2	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
FR - 4	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
FR - 7	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

Non-functional Requirements :

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

NFR No.	Non-Functional Requirement	Description
NFR - 1	**Usability**	It is well suited for fields requiring diverse application of processes with efficiency , precision and ease.

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