

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

Date	03 October 2022
Team ID	PNT2022TMID14251
Project Name	NATURAL DISASTER INTENSITY ANALYSIS AND CLASSIFICATION USING ARTIFICIAL INTELLIGENCE
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Mobile application usability theory has anchored on general usability literature, which is heavily based on software and website contexts
NFR-2	Security	The ability to analyze a large amount of data will enable artificial intelligence systems to anticipate possible natural disasters before they happen, thus preventing the loss of human lives.

NFR-3	Reliability	High-quality data are the foundation for understanding natural hazards and underlying mechanisms providing ground truth, calibration data and building reliable AI-based algorithms
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Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Description
FR-1	Data collect	Collecting data from trusted sources, in addition to collecting analysis
FR-2	Data filter	Filtering of demographic information, as well as filtering of countries, region, state, or province with cases of disasters
FR-3	Data count	Counting, globally or from a specific location, of confirmed cases, recovered and deaths by serious disasters
FR-4	Displays information panel	Display of maps, histograms, or an interactive geographic panel
FR-5	Importing and exporting data	Exporting results, data, or information in CSV or JSON format, as well as importing data from CSV files
FR-6	Show orientation	Displaying disaster prevention tips, a page with information on how to protect itself, travel tips, emergency contacts, link to websites with important information about the disasters

Non-functional Requirements:

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

NFR-4	Performance	AI shows great potential to support data collection and monitoring, the reconstruction and forecasting of extreme events, and effective and accessible communication before and during a disaster.
NFR-5	Availability	AI-based methods can be very effective if a training dataset covers very large events. However, the availability of such data is limited because of the rarity of these events.
NFR-6	Scalability	The ability to analyze a large amount of data will enable artificial intelligence systems to anticipate possible natural disasters before they happen, thus preventing the loss of human lives