

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

Date	19 May 2023
Team ID	NM2023TMID22485
Project Name	Project – Automated weather classification using transfer learning

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Interaction	User interacts with the UI to choose an image.
FR-2	Data Processing	The data is processed, integrated and analyzed using VGG19 model.
FR-3	User visualizing	User sees the predictions displayed in the Flask UI

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Even people who do not have complete knowledge about the system can use the system easily.
NFR-2	Security	The details provided by the user will not be accessed by unauthorized people and hence it offers complete data security.
NFR-3	Reliability	The database update process has roll backs for all related updates when any update fails.
NFR-4	Performance	The system uses highly trained model and it show high precision in predicting the results.
NFR-5	Scalability	The system architecture is designed in a scalable manner, utilizing techniques such as horizontal scaling, distributed scaling and load balancing etc.,