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

Team ID	PNT2022TMID26340
Project Name	EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE
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	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image Recognition	The system shall be able to take real inputs of satellites images and determine whether image contains fire or not.
FR-4	Forest Monitoring	Forests are monitored 24/7 by the web cameras.
FR-5	Detection	The system shall take training sets of fire and check for fire or no fire.
FR-6	Alert Message	The system will send notification to the authorities when fire is detected.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The forest fire can be detected as fast as possible.
NFR-2	Security	A huge area of forest can be saved from forest fires.
NFR-3	Reliability	The Web camera that uses CNN detects the clear image of fire.
NFR-4	Performance	Accurately measures the radius of fire that is being spread while the forest fire occurs with the help of web cameras. This enables authorities arrange the man power accordingly.
NFR-5	Availability	At the correct time, the authorities will receive the alert from the web cameras.
NFR-6	Scalability	If the authorities take quick action once they receive the alert message, they will be able to prevent huge loss of forest area.