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

Date	14 October 2022
Team ID	PNT2022TMID03442
Project Name	Emerging methods for early detection of forest fires
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 No-1	Video surveillance start	Start surveillance through remote control
FR No-2	Forest monitoring	Continuous monitoring through camera
FR No-3	Detect fire	Fire is detected through CNN model
FR No-4	Alert	Alert the forest officials through message

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR No-1	Usability	Monitoring of the potential risk areas and an early detection of fire can significantly shorten the reaction time and also reduce the potential damage as well as the cost of fire fighting.
NFR No-2	Security	More secure environment.
NFR No-3	Reliability	Model is safe to install.
NFR No-4	Performance	Model will achieve high accuracy.
NFR No-5	Availability	Build model is available all the time.
NFR No-6	Scalability	The current requirement for a cargo compartment detection system is that a fire has to be detected in 1 minute, and in that time be so small that the fire is not a significant hazard to the airplane. Nuisance alarms also plague the industry, with upwards of 90% of fire alarms being false warnings.