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

Date	15 October 2022
Team ID	PNT2022TMID49509
Project Name	Emerging methods for early detection of forest fire
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User collects the real time data.	• The user collects the real time data to identify the exact weather conditions.
FR-2	Cameras fixed in the forest.	• The captured data are collected from the cameras.
FR-3	Store the data.	• The data are stored in the cloud
FR-4	Fire Monitoring.	• The forest is continuously monitoring through the camera and drones.
FR-5	Fire detection.	• The fire is detected using CNN(Convolutional Neural Network)model.
FR-6	Notification.	• Once the fire is detected it is notified through the message and fire alarm system.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	• Most essential trees can be saved. • Many valuable extinction species can be saved.
NFR-2	**Security**	• It is used to secure environment.
NFR-3	**Reliability**	• The model is more accurate to find the fire at the earliest.
NFR-4	**Performance**	• In the model, the alert message is an immediate action without any lag.
NFR-5	**Availability**	• The model is available at 24/7.
NFR-6	**Scalability**	• The trained model is capable of adapting according to the dataset and the environment situation.