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

Date	15 October 2022
Team ID	PNT2022TMID12754
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-1	**User Registration**	Registration through Form Registration through Gmail
FR-2	**User Confirmation**	Confirmation via Email Confirmation via OTP
FR-3	**Data Prediction**	Scientists create computer models to predict the potential of wildlife and the range of potential climate prospects. Scientists use various temperature and fertilization forecasts to predict when and when 4,444 species of wildlife will be most likely to appear**.**
FR-4	**Using Sensors**	Installed on AI-enabled wildfire detection systems,these Bosch environmental sensors ar e being deployed as early warning tools for wildfires.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Many methods have been proposed using positive and negative aspects and detection performance metrics for forest fire detection. such as camera-based systems. WSN-based systems. and machine learning application-based systems.
NFR-2	**Security**	We developed this project to protect against wildfires.
NFR-3	**Reliability**	A classification time of 1.24 seconds was achieved with an accuracy of 91% and an F1 score of 0.91.
NFR-4	**Performance**	The main purpose of using dyons in the event of a fire is to gain situational awareness that can be used to guide the fighter's efforts to locate and control hotspots. As with enemies, it's best to keep an eye on your vehicles so you know what they're dealing with.
NFR-5	**Availability**	Wildfires (wildfires) are a common hazard in forests. especially in remote or unmanaged areas. AI can detect wildfires, high CO2 levels and temperatures.

NFR-6	**Scalability**	A widely used measure of fire strength is fire line strength, which is the rate of heat transfer per unit.