Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	20 October 2022
Team ID	PNT2022TMID09256
Project Name	Emerging methods for early detection project fire.
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR NO.	FUNCTIONAL REQUIREMENTS(Epic)	Sub Requirements(Story/Sub-Task)
FR-1	Image Processing	Transforming an image into a digital form.
FR-2	Fire Detection	The sense of one or more of the products or phenomena resulting from fire, such as smoke, heat, infrared and/or ultraviolet light radiation, or gas.
FR-3	Smoke Detection	A device that senses smoke, typically as an indicator of fire.
FR-4	Alarm Generation	An audible and/or visible means of indicating to the operator an equipment malfunction, process deviation, or abnormal condition.
FR-5	Message Generation	The assessment of an advertisement's effectiveness after it has been used.
FR-6	Automatic Water Supply	A watering system capable of being set to turn on and off automatically at pre-determined times, without human intervention.

Non-functional Requirements:

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

FR.NO	Non-Functional Requirements	Description
NFR-1	Usability	Limit the emission of toxic products created by combustion, as well as global-warming gases produced by the fire itself.
NFR-2	Security	It receives the signals from the detectors and manages and centralizes the entire response to the fire.
NFR-3	Reliability	Important to ensure that safety-critical systems
NFR-4	Performance	The formal analysis of the desired function of fire detection systems, to identify the performance parameters of fire detection systems.
NFR-5	Available	Aspirating smoke detector generally consists of a central detection unit that sucks air through a network of pipes to detect smoke
NFR-6	Scalability	Better sensitivity than fire surveillance based on imaging.