

Solution Requirements (Functional & Non-functional)

Date	20 November 2022
Team ID	PNT2022TMID24176
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

Sn.No	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1.	Surveillance	The forest is being tracked using cameras
2.	Image preprocessing	The frames which are captured from the video are preprocessed
3.	Model building	The CNN model is created using CNN algorithm to detect the forest fire
4.	Detect the fire	CNN model will detect whether any smoke or fire is present in the forest area
5.	Alert message	If any smoke or fire is detected, then alert message will be sent to the authorities and nearby fire station

Non-functional Requirements:

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

Sn. No.	Non-Functional Requirement	Description
1.	Usability	Forest fire can be easily detected and it reduces the wildlife endangering. Monitoring is easy and it is more efficient than traditional way of monitoring.
2.	Security	It gives more secure environment for wild animals
3.	Reliability	It is easy to install and monitor
4.	Performance	Model will give high accuracy than any other techniques
5.	Availability	It is available for 24/7
6.	Scalability	The alert message will be sent to the authorities faster and they can prevent the fire as soon as possible