

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

Date	05 November 2022
Team ID	PNT2022TMID20714
Project Name	Project – Early detection of forest fire using deep learning
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 Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Image recognition	The system shall be able to take real inputs of satellites images and determine whether image contains fire or not.
FR-4	Forest Monitoring	Forest are monitored 24/7 through
FR-5	Alert	The system will send notification to the user when fire is detected
FR-6	Detection	The system shall take training sets of fire and checks for fire or no fire or smoke
FR-7	Operating system	The system can run as a service on Windows or Linux operating system.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Model is user friendly to use and very effective.
NFR-2	<b>Security</b>	More secure environment
NFR-3	<b>Reliability</b>	Model is safe to install
NFR-4	<b>Performance</b>	Model will achieve high accuracy
NFR-5	<b>Availability</b>	Build model is available in all the time
NFR-6	<b>Scalability</b>	Model can handle large amount of data and can easily adapt to every environment.
NFR-7	<b>Testability</b>	Putting in more training data into the model can improve the accuracy level of the system.