

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

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|---------------|---|
| Date | 05 November 2022 |
| Team ID | PNT2022TMID37993 |
| Project Name | Emerging Methods For Early Detection of Forest fire |
| 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 | Usability | Model is user friendly to use and very effective. |
| NFR-2 | Security | More secure environment |
| NFR-3 | Reliability | Model is safe to install |
| NFR-4 | Performance | Model will achieve high accuracy |
| NFR-5 | Availability | Build model is available in all the time |
| NFR-6 | Scalability | Model can handle large amount of data and can easily adapt to every environment. |
| NFR-7 | Testability | Putting in more training data into the model can improve the accuracy level of the system. |