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

| Date | 03 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID42321 |
| 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 Gmail |
| | | Registration through Form |
| FR-2 | User Confirmation | Confirmation via Email |
| | | Confirmation via OTP |
| FR-3 | Image recognition | The Input image data from the satellites should be able |
| | | to analyze and recognize the image contains fire or not. |
| FR-4 | Forest Monitoring | The forests should be monitored all the time. |
| FR-5 | Alert | The alert message should be sent to the fire |
| | | department and customers. |
| FR-6 | Detection | System will detect if there is fire or not using the data |
| | | sets provided. |
| FR-7 | Operating system | The system should be able to run on either Window or |
| | | Linux operating systems. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | Very effective model and Easy to use , user friendly model. |
| NFR-2 | Security | The environment is Secure. |
| NFR-3 | Reliability | Model is safe to install and use. |
| NFR-4 | Performance | Model will achieve high accuracy and provide spontaneous response. |
| NFR-5 | Availability | Model is available for all the time and can access all the time. |
| NFR-6 | Scalability | Model can easily adapt to every environment and also can handle large amount of data. |