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

| Date | 29 October 2022 |
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| Team ID | PNT2022TMID40383 |
| 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 Form |
| | | Registration through Gmail |
| FR-2 | User Confirmation | Confirmation via Email |
| | | Confirmation via OTP |
| FR-3 | Authentication | Through OTPs or OAuth |
| FR-4 | User Monitoring | Prediction using Artificial Intelligence |
| | | Live status of patches of Forests |
| FR-5 | GPS Tacking | Track the location |
| FR-6 | Administrative functions | Preserving, Restoring, Maintaining and Protecting data of the species |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Our solution is intended for Forest officers, Biologist, Naturalist, Ecologist with the goal of protect forests. |
| NFR-2 | Security | Good encryption, authentication and authorization. |
| NFR-3 | Reliability | Framework for creating digital devices that supports the flora and fauna in the forests. |
| NFR-4 | Performance | Transfer learning approach to improve accuracy and performance of the application. |
| NFR-5 | Availability | Application will also work on offline to notify user through messages. |
| NFR-6 | Scalability | With the help of cloud services, a greater number of users can access the application |