**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

|  |  |
| --- | --- |
| Date | 17 October 2022 |
| Team ID | PNT2022TMID03761 |
| 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 |