**Project Design Phase-II**

**Solution Requirements (Functional & Nonfunctional)**

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| Date | 4 November 2022 |
| Team ID | PNT2022TMID51748 |
| 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.

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| **FR** | **Functional** | **Sub Requirement (Story / Sub-Task)** |
| **No.** | **Requirement (Epic)** |  |
| FR-1 | Forest monitoring | Continuous monitoring through camera |
| FR-2 | Image Processing | Real time data processing and generating and to manipulate the data on the cloud side. |
| FR-3 | Create and test model | Creating the model , training and testing it with the data’s preprocessed. |
| FR-4 | Detect fire | Fire is detected through CNN model |
| FR-5 | Alert | The system shall send a notification to the admin when it recognizes a fire. |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The use in real time, within tactical framework |
| NFR-2 | **Security** | System has cloud backup and thus secured. |
| NFR-3 | **Reliability** | In any incident the system will inform before any fire accident. |
| NFR-4 | **Performance** | Putting in more training data into the system will improve the accuracy of its ability to detect a fire |
| NFR-5 | **Availability** | Build model is available all the time |
| NFR-6 | **Scalability** | Putting in more training data into the system will not affect the system. |