**Project Design Phase-II**

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

| **Date** | **12 November 2022** |
| --- | --- |
| **Team ID** |  |
| **Project Name** | **Project - Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence** |
| **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 | * Registering via Google Accounts * Registering via Product's own user management system |
| FR-2 | User Authentication | • Verification through OTP  • Verification through Email Link |
| FR-3 | Designation of Region | • Ease of selection of necessary areas to be monitored  • Versatile and Flexible operations an designated areas |
| FR-4 | Analysis of Required Phenomenon | • Simple and easy analysis on the specific phenomenon to be observed |
| FR-5 | Accumulation of required Data | • Fast and Efficient data gathering capabilities regarding past event analysis and future prediction |
| FR-6 | Organizing Unstructured data | • Processing of raw and clustered data into clear and refined data which is useful for analysis and prediction tasks |
| FR-7 | Algorithm selection | • The freedom to choose from several classes of algorithm to be used in the process  • Customization of algorithm to suit the needs of a specific purpose |
| FR 8 | Prediction and analysis of data the process | • Advanced visualization techniques to help visualize the processed data for effective |
| FR-9 | Report generation | • Restructuring of obtained results into clear and detailed report for future studies |

**Non-functional Requirements:**

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

| NFR No | Non-Functional Requirement | Description |
| --- | --- | --- |
| NRF - 1 | **Usablity** | It is well suited for fields requiring diverse application of processes with efficiency. precision and ease. |
| NRF - 2 | **Security** | It provides a distinct and secure encryption layer to the system interface for additional security standards. |
| NRF - 3 | **Reliability** | The product is robust and is capable of execution of processes even in the most difficult and unpredictable environments. |
| NRF - 4 | **Performance** | The product boasts a high precision and efficient working capacity which helps in escalating its performance to the highest degree. |
| NRF - 5 | **Availability** | Despite the complexity and degree of difficulty in its operation, the product is equipped with all-round maintenance and readily available technical services which provides the necessary support any individual requires in their duties. |
| NRF - 6 | **Scalability** | The product also possess enough room for the improvement of its specifications to upgrade its capabilities according to the needs of the user and their organization |