**Project Design Phase-II**

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

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| Date | 13 May 2023 |
| Team ID | NM2023TMID10432 |
| Project Name | Project – Automated Weather Classification |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User Input | The operator shall be able to input the weather periods to the system to view the desired weather parameters within the particular periods. |
| FR-4 | Output Accuracy | The system shall be able to produce minimum, maximum and the average data of a particular weather parameter when it is requested by an operator. |
| FR-5 | Various Parameters | The system shall provide the following weather parameters: temperature, pressure, wind speed & direction, rainfall, and humidity. |
| FR-6 | Reporting | The system reports particular weather information according to the time. |

**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** | It will be easy for a user to learn and operate the system. |
| NFR-2 | **Security** | Access permissions for the particular system information may only be changed by the system’s data administrator. |
| NFR-3 | **Reliability** | The system works without failure. The database update process must rollback all related updates when any update fails. |
| NFR-4 | **Performance** | It responds quickly to various user interactions with it like the frontpage load time is no more than 2 seconds. |
| NFR-5 | **Availability** | The system’s functionality and services are available for use with all operations. New module deployment doesn’t impact front page and checks for pages availability. |
| NFR-6 | **Scalability** | This serves more users, process more data. The website traffic is scalable enough to support 200,000 users at a time. |