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

| Date | 03 October 2022 |
|---------------|----------------------------------------------------------------|
| Team ID | PNT2022TMID32615 |
| Project Name | Exploratory Analysis of RainFall Data in India for Agriculture |
| Maximum Marks | 4 Marks |

Functional Requirements:

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|----------------------------------------------------------|
| FR-1 | User Registration | Registration via form or email ID and password |
| | | creation |
| FR-2 | User Confirmation | Confirmation via Email or OTP |
| FR-3 | User Login | Using the registered email ID and password as login |
| | | credentials |
| FR-4 | Profile | View the profile and change their credentials |
| FR-5 | Dashboard | Live visualisation of data based on the chosen region |
| FR-6 | Searching | Searching for results and information by place and |
| | | region |
| FR-7 | Visualization | Visualization of data based on days, weeks, months and |
| | | year. |
| FR-8 | Prediction | Giving inputs to get the prediction on rainfall using an |
| | | ML-based model |
| FR-9 | Feedback & Support | User can post their queries, questions and we support |
| | | them by replying |

Non-functional Requirements:

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| NFR-1 | Usability | Simple user interface where user can navigate through different menu. The system doesn't expect any technical prerequisites from the user's side |
| NFR-2 | Security | User details and login credentials should be safe and secure by suggesting a strong password |
| NFR-3 | Reliability | Portable and cross platform independent Easy to use and flexible |
| NFR-4 | Performance | Response time will be faster. Accuracy of the data and calculation depends on the dataset |
| NFR-5 | Availability | Available 24/7 |
| NFR-6 | Scalability | In future we can add additional features related to weather data |