**Project Design Phase-II**

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID22690 |
| Project Name | Project - Exploratory Analysis of Rainfall Data  in India for Agriculture |
| Maximum Marks | 4 Marks |

**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 | Prediction | Prediction will be shown on the web page after  processing the inputs from the user. |
| FR-4 | Visualization | Visualizing the user-specific data in different forms |
| FR-5 | User tracking | Maintaining the history of the user's search operations |
| FR-6 | End Result | Getting location and amount of rainfall in an area |

**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** | * Simple, interactive and user friend interface of the website for easy navigation. * The system doesn’t expect any technical pre- requisites from the user’s side. |
| NFR-2 | **Security** | * User preferences and the predictions need to be confidentially maintained. * The confirmation of a valid user is required for authentication. |
| NFR-3 | **Reliability** | * Portable and cross-platform independent * The application should be subjected to an experiment, test, or measuring procedure that yields the same results on repeated trials |
| NFR-4 | **Performance** | * Traffic should be efficiently managed and the accuracy of the results should be good. * The page should not take a lot of time to load the contents and display them. |
| NFR-5 | **Availability** | * The application should be compatible on the device that the user chooses to use. * The system should run 24 hours a day, 7 days a week *[24/7 available]* |
| NFR-6 | **Scalability** | * The application should be in the way of adding new functionalities or modules without affecting the existing functionalities * The system should be able to manage numerous users at a time and be less prone to errors |