

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

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|---------------|--|
| Date          | 15 October 2022  |
| Team ID       | PNT2022TMID36582   |
| Project Name  | Exploratory Analysis of Rainfall Data in India for Agriculture |
| 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 Login                    | Registration through Form<br>Registration through Google<br>Registration through Git |
| FR-2   | User details confirmation     | Confirmation via Email   |
| FR-3   | Prediction details            | User should enter the current location to get the predicted result.                  |
| FR-4   | Forecasting Accuracy          | Retrieve the forecasted weather conditions and measure the accuracy.                 |
| FR-5   | Forecast                      | Forecasted flood probability from the rainfall amount is displayed on the webpage.   |
| FR-6   | Snapshots                     | The web page will display the condition as a report and pictures.                    |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | Usability                  | The usability of the website is to make all users will be satisfied with the our requirements of the product. The user should reach the summarized text or result with one button press if possible |
| NFR-2  | Security                   | The security of the project is to develop the website that prevents SQL injection attack, XSS attack and DOS attack   |
| NFR-3  | Reliability                | The reliability of the system is to make sure the website does not go offline. The users can be reach and use program at any time, so maintenance should not be a big issue.                        |
| NFR-4  | Performance                | The performance of the website is to provide data to all users without unnecessary delay and provide 24*7 availability  |

|       |                     |   |
|-------|---------------------|---|
| NFR-5 | <b>Availability</b> | The availability of the website is that the website will be active on the Internet and people will be able to browse to it.             |
| NFR-6 | <b>Scalability</b>  | The scalability of the system is we have limited our project to Indian cities and we have future plans to scale it to Continents level. |