

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

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID52711 |
| 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.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|---------------------------------|--|
| FR-1 | Import necessary packages | Importing packages like NumPy, pandas, seaborn, etc |
| FR-2 | Download and load dataset | Download the dataset Load the Appropriate dataset |
| FR-3 | Pre-processing of data | Making data suitable for building a good model |
| FR-4 | Building Machine learning model | Choose the best algorithm. Check for the best optimised result. |
| FR-5 | Train the data | Train the model using training data. |
| FR-6 | Test the model | Test the model for the best evaluation and analysing. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|--|
| NFR-1 | Usability | Can be used anywhere(remote villages to metropolitan cities), anybody (kids to old age) |
| NFR-2 | Security | Security is given over the model, so the user can use this with full trust. However, there are no personal details required to use this. |
| NFR-3 | Reliability | Good connectivity and a supporting device can provide good results upto an extent. |
| NFR-4 | Performance | This model can give a high accuracy prediction. |
| NFR-5 | Availability | Any person can use this and this is an open-source model. |
| NFR-6 | Scalability | Farmers, Vegetable sellers, citizens can use this, prediction of data is accurate. |