

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMID17339 |
| Project Name | Project – Fertilizer Recommendation System For Disease Prediction |
| 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 Registration | Registration through Form Registration through Gmail Registration through LinkedIn |
| FR-2 | Image Capture | Capture image of leaf Check the leaf is captured under given parameters |
| FR-3 | Image Processing | Upload the leaf image Start detection |
| FR-4 | Leaf Prediction | Identify the parameter to be considered for the identification of diseases. |
| FR-5 | Image Description | Show the prescribed fertilizer to be used for un healthy leaf |
| FR-6 | Providing Dataset | Training datasets Testing datasets |
| FR-7 | Adding Datasets | Fruit dataset and vegetable dataset |
| FR-8 | Updated Native Language options | Languages can be changed according to the user wish |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|---------------|-----------------------------------|---|
| NFR-1 | Usability | Leaf datasets can be used for detection of all kind of leaf's Datasets can be reusable Data sets can be prepared according to the leaf |
| NFR-2 | Security | User information and leaf data are secured The algorithms used are more secure |
| NFR-3 | Reliability | The leaf quality is more The datasets and image capturing performs consistently well |
| NFR-4 | Performance | Leaf problem defines once the leaf is detected Performs well according to the quality of leaf provides certain cure to it. |
| NFR-5 | Availability | Quality of leaf will be used again for detection Available and easy access of datasets provided |
| NFR-6 | Scalability | Increase in growth of predicting the results and defining a leaf |