

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

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| Date | 16 October 2022 |
| Team ID | PNT2022TMID36196 |
| Project Name | FERTILIZERS RECOMMENDATION SYSTEM FOR DISEASE PREDICTION |
| Maximum Marks | 4 Marks |

Functional Requirements:

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|---|
| FR-1 | User Registration | Registration through Google Account Registration through Gmail Registration through Form |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Required Data | The user should upload the clear image of the sample (Fruit Or Vegetable) that affected by the disease. |
| FR-4 | Image Processing | The uploaded image by the user is processed by the AI to predict the disease and to suggest the required fertilizer. |
| FR-5 | Dataset | Data of the fruits and vegetables. Data of the diseases. Data of the fertilizers. |
| FR-6 | System notification | The application will notify the user once the complete processing is over and the suggestion to increase the productivity of the crops can also notified. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The disease can be predicted in the early stage and the fertilizer required is suggested. |
| NFR-2 | Security | The user data will be secured and protected against malware attacks or unauthorized access. |
| NFR-3 | Reliability | The prediction of the disease will be more accurate when the high quality image sample is uploaded. |
| NFR-4 | Performance | Prediction of disease is easier and faster than the previous model. |
| NFR-5 | Availability | The application is available 24/7 to the user during their subscription period. |
| NFR-6 | Scalability | The application shall be able to support an annual growth of 10 percentage of new customers and the datasets are updated. |