3.2 Solution Requirement

3.2.1 Functional Requirements

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|------------------------------------|
| | | - Registration through Form |
| FR-1 | User Registration | - Registration through Gmail |
| | | - Registration through LinkedIn |
| FR-2 | User Confirmation | - Confirmation via Email |
| | | - Confirmation via OTP |
| FR-3 | Data Integration | - Import Environmental Data |
| | | - Import Management Data |
| | | - Data Cleaning and Transformation |
| FR-4 | Data Visualization | - Create Dashboards in Power BI |
| | | - Display Trends and Correlations |
| | | - Generate Customized Reports |
| FR-5 | Prediction System | - Develop Machine Learning Models |
| | | - Predict Plant Growth Stages |
| | | - Provide Recommendations |

3.2.2 Non-Functional Requirements

| | Non-Functional Requirement | Description |
|-------|-------------------------------|--|
| NFR-1 | IUsability | The solution must have an intuitive and user-friendly interface. |
| NFR-2 | Security | Ensure secure data storage and user authentication. |

| | Non-Functional Requirement | Description |
|-------|-------------------------------|--|
| NFR-3 | Reliability | The system should be highly dependable and provide accurate predictions. |
| NFR-4 | Performance | Maintain fast processing and data visualization even with large datasets. |
| NFR-5 | Availability | Ensure 99.9% system uptime to guarantee accessibility. |
| NFR-6 | Scalability | The solution must be scalable to handle increasing data volumes and users. |