**RoshanKisan**

**Functional Requirements:**

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| **ID** | **Requirement** | **Description** |
| FR1 | User Registration and Authentication | Users should be able to create accounts and log in securely, with varying roles and permissions. |
| FR3 | AI-Driven Disease Detection | The system should identify crop diseases using AI and provide timely alerts to users. |
| FR4 | Weather Information | The application must offer real-time weather forecasts and recommendations based on the user's location. |
| FR7 | Collaboration and Information Sharing- **Community** | Farmers should communicate, share insights, and discuss agricultural topics through the platform. |
| FR8 | Mobile Application | The app should be available for iOS and Android, featuring an intuitive and user-friendly interface. |
| FR10 | Feedback and Support | Users will be able to give feedback and can get support |
| FR11 | Chatbot | Users will be able to get support through AI chatbot regarding app and agriculture |
| FR12 | Multilingual Language | Urdu, English, (Punjabi, Sindhi optional will work later) |

**Non-Functional Requirements:**

| **ID** | **Requirement** | **Description** |
| --- | --- | --- |
| NFR1 | Scalability | The system must handle increasing users and data without performance degradation. |
| NFR2 | Security | User data should be securely stored and transmitted, and AI models must be robust against attacks. |
| NFR3 | Performance | The application should respond quickly to user requests, especially for real-time data like weather forecasts and disease detection. |
| NFR4 | Reliability | The system must be available with minimal downtime and have disaster recovery procedures to prevent data loss. |
| NFR5 | Compatibility | The mobile app should work on various devices and screen sizes, both old and new smartphones. |
| NFR6 | Regulatory Compliance | The system should adhere to data privacy and agricultural regulations, ensuring compliance with legal requirements. |
| NFR7 | Usability | The user interface should be intuitive, catering to users with varying technical expertise, and should consider user feedback for improvements. |
| NFR8 | Integration | The system should integrate with external data sources (e.g., weather APIs) and have APIs for potential third-party integrations. |