Pega GenAl *** Blueprint**™

APPLICATION OVERVIEW DOCUMENT

Plantix

Congratulations on completing your application definition! This document presents a summary overview of your application as defined in the Pega platform. It encapsulates the key elements of your application's design, highlighting its core functionalities and overall structure.

Please note that this is a high-level view and does not include granular details like data models or sample data. It's an ideal resource for a quick reference, facilitating discussions among team members and stakeholders, and for guiding strategic decisions in your application development process.

Blueprint ID: BP-135360

a Application Context

Organization name Industry Language KRCE Other English

Application purpose

Plantix

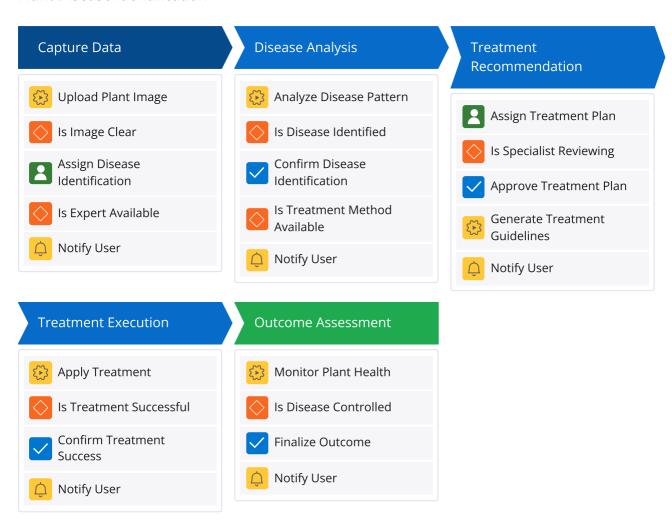
Functional description

Plant disease identifying applications aim to help farmers, gardeners, and anyone interested in plant health to: * Early Detection: Identify diseases at their initial stages, allowing for timely intervention and preventing further spread. * Accurate Diagnosis: Provide reliable diagnoses, reducing the risk of misidentification and incorrect treatment. * Reduced Reliance on Experts: Empower users to make informed decisions without always needing to consult with agricultural specialists. * Improved Treatment: Offer guidance on appropriate treatment methods, including the use of pesticides, fungicides, or other control measures. * Increased Productivity: Minimize crop losses due to diseases, leading to higher yields and improved agricultural efficiency. * Sustainable Agriculture: Promote the use of targeted treatments, reducing the overuse of chemicals and minimizing environmental impact. * Education and Awareness: Raise awareness about plant diseases and their symptoms, fostering a better understanding of plant health. These applications typically utilize image recognition technology, often powered by machine learning algorithms, to analyze images of plant leaves or other affected parts and identify potential diseases.

⊟ Workflows (Case Types)

Disease Identification

Plant Disease Identification



Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Plant Location	The location where the plant is being	Text	✓
Plant Name	The name of the plant being diagnosed fo	Text	✓
Plant Type	The type or species of the plant being	Text	✓
Symptom	Description of the symptoms observed o	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓
Additional Notes	Any specific notes or additional	Text	

Field Name	Description	Туре	Primary
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Diagnosis	Date and time when the diagnosis proces	DateTime	
Diagnosis Start Date	Date and time when the diagnosis proces	DateTime	
Disease Identified	The specific disease identified in the plant	Text	
Image Reference	Image URL or reference to the image of t	Text	
Resolved by	User that resolved the case	Text	
Resolved date/time	Date/time case was resolved	DateTime	
Treatment	Recommended treatment or action to be	Text	

Early Detection

Early Detection of Plant Diseases to Prevent Spread and Damage



Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual	Text	✓
Case Label	Label for this individual case instance	Text	✓
Detection Start Date	The date and time when the disease	DateTime	✓
Image URL	The link to the images of the plant or	URL	✓
Location/Area	The location or area where the plant	Text	✓
Plant/Crop Name	The name of the plant or crop being	Text	✓
Recommendation/Action	The recommendation or action	Text	✓

Treatment

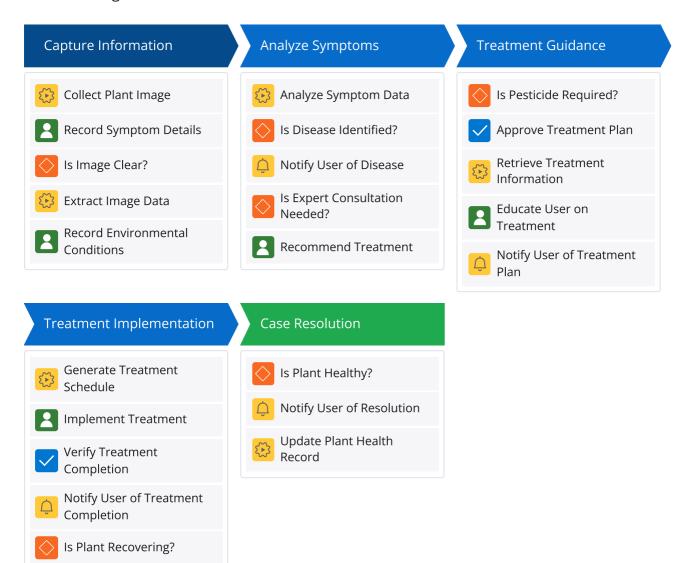
Completion

Notify User of Treatment

Field Name	Description	Туре	Primary
Symptom Description	The description or notes about the	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓
Affected Plant Part	The specific part of the plant or crop	Text	
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case	Text	
Detection Instance ID	The unique identifier for the disease	Text	
Disease Type/Category	The type or category of the plant	Text	
Resolved by	User that resolved the case	Text	
Resolved date/time	Date/time case was resolved	DateTime	
User Performing	The username or identifier of the use	Text	

Accurate Diagnosis

Accurate Diagnosis of Plant Diseases for Effective Treatment

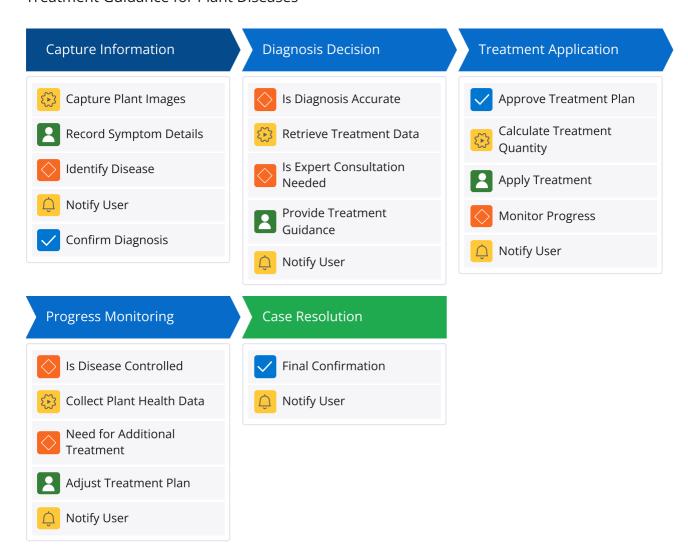


Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Diagnosis	The confidence level of the diagnosis. This	Text	✓
Location	The geographic location of the plant. This	Text	✓
Plant Name	The name of the plant being diagnosed. Th	Text	✓
Symptom	The description of symptoms observed on	Text	✓
Symptom Onset	The date when symptoms were first notice	Text	✓
Treatment	The suggested treatment for the diagnose	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓

Field Name	Description	Туре	Primary
Work Status	Work status of the case	Text	✓
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Diagnosis Case ID	The unique identifier for the diagnosed cas	Text	
Diagnosis Notes	Additional notes or comments related to th	Text	
Diagnosis Source	The source or origin of the diagnosis input	Text	
Disease Type	The type or category of the diagnosed	Text	
Resolved by	User that resolved the case	Text	
Resolved	Date/time case was resolved	DateTime	

Treatment Guidance

Treatment Guidance for Plant Diseases

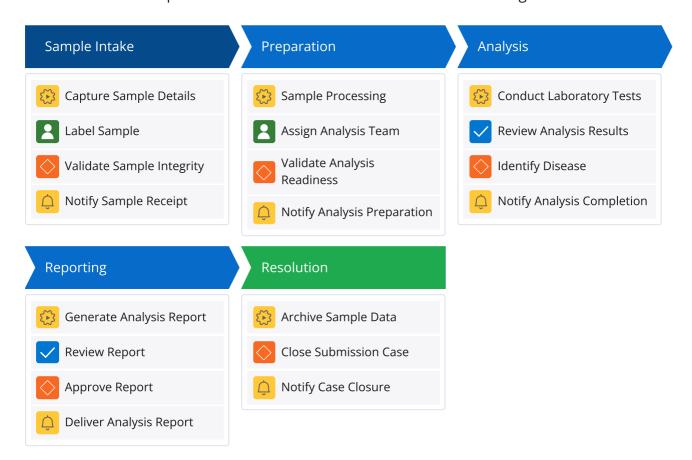


Field Name	Description	Туре	Primary
Additional	Additional notes or comments related to t	Text	✓
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Growth Location	Location or region where the plant is bein	Text	✓
Plant Name	Name of the plant being diagnosed. This	Text	✓
Symptom	Description of the symptoms observed on	Text	✓
Treatment	Recommended treatment or guidance for	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓

Field Name	Description	Туре	Primary
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Guidance Date	Date when the treatment guidance was	Date	
Guidance Provider	User who provided the treatment guidanc	Text	
Image Links	Link to related images of the affected plan	URL	
Resolved by	User that resolved the case	Text	
Resolved date/time	Date/time case was resolved	DateTime	
Status	Status of the plant disease diagnosis and	Text	
Treatment Applied	Indicates whether the treatment guidance	Boolean	

Sample Submission

Plant Sample Submission for Laboratory Analysis involves the process of receiving and analyzing plant samples sent by users for identification of potential diseases. The workflow includes sample intake, labeling, preparation, analysis, and reporting, ensuring that accurate results are provided to the users for informed decision-making.

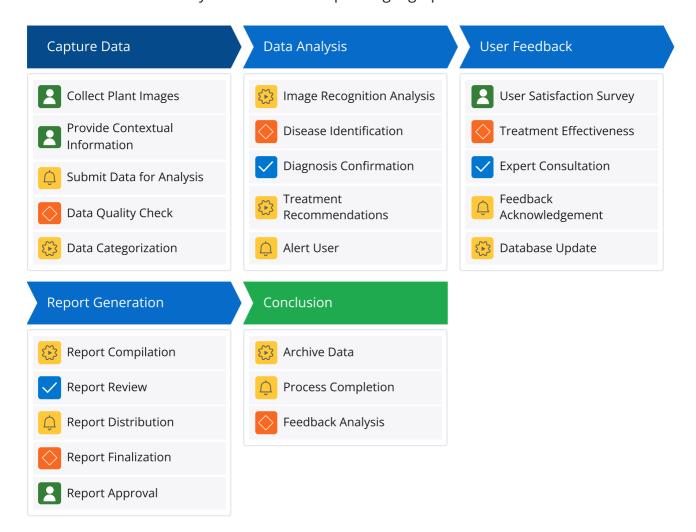


Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Plant Type	Type of plant from which the sample was	Text	✓
Sample	Location where the plant sample was collecte	Text	✓
Submitter	Contact information of the person submitting	Text	✓
Submitter Name	Name of the person submitting the plant	Text	✓
Symptom	Description of the symptoms or issues	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓
Additional	Additional notes or comments related to the	Text	

Field Name	Description	Туре	Primary
Assigned Analyst	Assigned analyst or technician responsible fo	Text	
Created by	User that created the case	Text	
Created	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Resolved by	User that resolved the case	Text	
Resolved	Date/time case was resolved	DateTime	
Sample ID	Unique identifier assigned to the plant sampl	Text	
Sample Status	Status of the plant sample within the	Text	
Submission	Date and time when the plant sample was	DateTime	

Field Observation

Field Observation and Reporting encompasses the workflow for users to record observations of plant health in the field using the application. This includes capturing images, providing contextual information, and submitting the data for analysis. It enables users to contribute to a collective database of plant health information, supporting early detection and trend analysis of diseases in specific geographic areas.

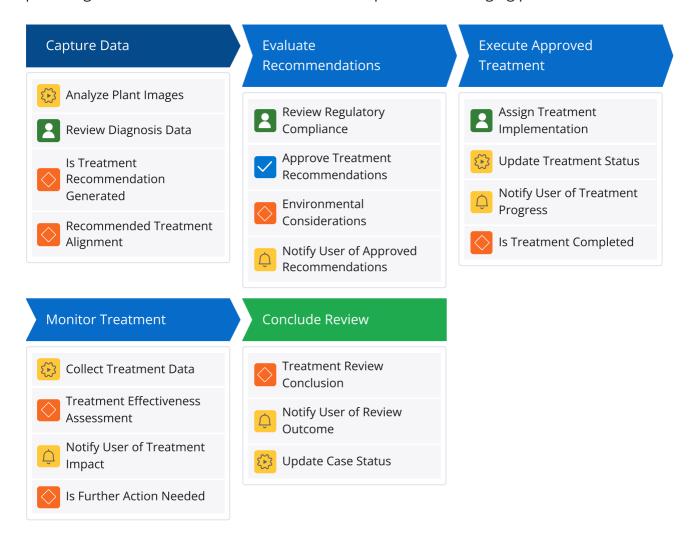


Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Image URL	Link to the image of the observed plant or	URL	✓
Observation Date	The date when the field observation is	Date	✓
Observation	Description of the observed plant health an	Text	✓
Observation	The location where the field observation is	Text	✓
Observer Name	The name of the person making the field	Text	✓

Field Name	Description	Туре	Primary
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓
Additional	Additional notes or comments related to th	Text	
Applied	Any specific actions or treatments applied t	Text	
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Disease	Identification of any known diseases or	Text	
Environmental	The environmental conditions at the	Text	
Plant Type	The specific type of plant or crop being	Text	
Resolved by	User that resolved the case	Text	
Resolved	Date/time case was resolved	DateTime	

Treatment Review

Treatment Recommendation Review involves the process of reviewing and approving treatment recommendations generated by the application based on the analysis of plant images and other relevant data. This workflow ensures that the recommended treatments align with best practices, regulatory guidelines, and environmental considerations, providing users with reliable and safe treatment options for managing plant diseases.



Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case	Text	✓
Case Label	Label for this individual case instance	Text	✓
Recommendation	The date when the treatment	Text	✓
Treatment	The description of the treatment being	Text	✓
Treatment Name	The name of the treatment being reviewed.	Text	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓

Field Name	Description	Туре	Primary
Assigned To	The username of the user assigned to	Text	
Created by	User that created the case	Text	
Created date/time	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Image ID	The unique identifier for the plant image	Text	
Recommendation	The unique identifier for the treatment	Text	
Resolved by	User that resolved the case	Text	
Resolved date/time	Date/time case was resolved	DateTime	
Review Comments	Additional comments or notes related to t	Text	
Review Decision	The decision outcome of the treatment	Text	
Review Status	The status of the treatment	Text	
Submitted By	The username of the user who submitted	Text	

Training Management

Training and Certification Management encompasses the workflow for users to access training materials, complete certification programs, and stay updated on the latest developments in plant health management. This includes tracking progress, issuing certifications, and providing access to educational resources, empowering users to enhance their knowledge and skills in disease identification and management.

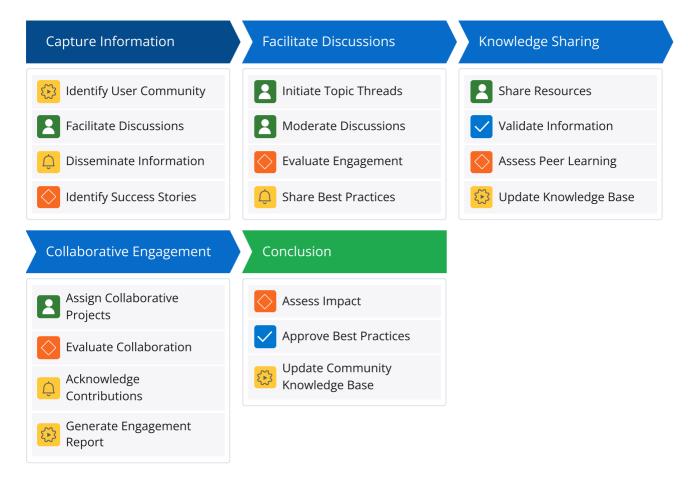


Field Name	Description	Туре	Primary
Case ID	Unique identifier for this individual case instance	Text	✓
Case Label	Label for this individual case instance	Text	✓
Certification	The certification status of the trainee. This field	Text	✓
Trainee Email	The email address of the trainee enrolling for th	Text	✓
Trainee Name	The name of the trainee enrolling for the trainin	Text	✓
Training End	The end date of the training program. This field	Date	✓
Training	The location or address of the training center	Text	✓

Field Name	Description	Туре	Primary
Training Sta	The start date of the training program. This field	Date	✓
Urgency	Priority/urgency of the case	Decimal	✓
Work Status	Work status of the case	Text	✓
Created by	User that created the case	Text	
Created	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Resolved by	User that resolved the case	Text	
Resolved	Date/time case was resolved	DateTime	
Trainer Name	The name of the trainer or instructor leading th	Text	
Training	The method or mode of training delivery, wheth	Text	
Training	The unique identifier for the training program	Text	
Training Type	The type or category of the training program,	Text	

Community Engagement

Community Engagement and Knowledge Sharing involves facilitating discussions, sharing success stories, and disseminating information related to plant disease management within the user community. This workflow fosters collaboration, peer learning, and the exchange of best practices, contributing to a more informed and connected user base actively involved in plant health preservation.



Case ID Unique identifier for this individual case Text Case Label Label for this individual case instance Text Engagement The description or details of the community Text Engagement The topic or subject of the community Text Initiator Email The email address of the plant community Text Initiator Location The location or region of the plant communi Text Initiator Name The name of the plant community member Text Urgency Priority/urgency of the case Decimal Work Status Work status of the case Text	Field Name	Description	Туре	Primary
Engagement The description or details of the community Text Engagement The topic or subject of the community Text Initiator Email The email address of the plant community Text Initiator Location The location or region of the plant communi Text Initiator Name The name of the plant community member Text Urgency Priority/urgency of the case Decimal	Case ID	Unique identifier for this individual case	Text	~
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Initiator Location The location or region of the plant communi Text Initiator Name The name of the plant community member Text Urgency Priority/urgency of the case Decimal	Engagement	The topic or subject of the community	Text	~
Initiator Name The name of the plant community member Text Urgency Priority/urgency of the case Decimal	Initiator Email	The email address of the plant community	Text	~
Urgency Priority/urgency of the case Decimal	Initiator Location	The location or region of the plant communi	Text	~
	Initiator Name	The name of the plant community member	Text	~
Work Status Work status of the case Text ✓	Urgency	Priority/urgency of the case	Decimal	~
	Work Status	Work status of the case	Text	~

Field Name	Description	Туре	Primary
Created by	User that created the case	Text	
Created	Date/time case was created	DateTime	
Description	Description for this individual case instance	Text	
Engagement ID	The unique identifier for the community	Text	
Engagement	The date and time when the community	DateTime	
Engagement	The URL or link to any relevant documents o	Text	
Engagement	The status of the community engagement,	Text	
Initiator ID	The unique identifier for the plant communi	Text	
Resolved by	User that resolved the case	Text	
Resolved	Date/time case was resolved	DateTime	

⊗ Data Objects & Integrations

Plant Disease

Represents the Disease Data Object and holds attributes like Name, Symptoms, Causes, and Treatments. It connects to the Plant Disease Database for accurate information and treatment recommendations.

Plant Image

Represents the Image Data Object and contains attributes like Image URL, Timestamp, and Geolocation. It connects to the Image Recognition System for analyzing plant images and identifying potential diseases.

Treatment Recommendation

Represents the Treatment Recommendation Data Object and includes attributes like Disease Name, Recommended Treatment, and Treatment Effectiveness. It connects to the Agricultural Knowledge Base for reliable treatment guidance.

User Activity

Represents the User Activity Data Object and holds attributes like User ID, Activity Type, Timestamp, and Geo-coordinates. It connects to the User Analytics System for tracking user interactions and behavior within the Plantix application.

Disease Category

Represents the Disease Category Data Object and includes attributes like Category Name and Description. It connects to the Disease Category Taxonomy for categorizing and organizing plant diseases based on their characteristics.

Plant Health Report

Represents the Plant Health Report Data Object and contains attributes like Plant ID, Disease Status, Health Score, and Recommendations. It connects to the Plant Health Monitoring System for generating comprehensive health reports based on disease identification and analysis.

User Profile

Represents the User Profile Data Object and includes attributes like User ID, Preferences, and Location. It connects to the User Management System for managing user profiles, preferences, and location-based services within the Plantix application.

№ Personas

Agricultural Extension Officer

Agricultural Extension Officer responsible for providing advice and support to farmers. They use Plantix to quickly identify and diagnose plant diseases, enabling them to offer accurate recommendations for disease management and treatment.

Small-scale Farmer

Small-scale Farmer who relies on Plantix to identify and diagnose diseases affecting their crops. They use the application to take proactive measures for disease management, leading to improved crop yields and sustainable agricultural practices.

Gardening Enthusiast

Gardening Enthusiast who utilizes Plantix to identify and address diseases affecting their garden plants. They rely on the application for accurate diagnoses and treatment recommendations, helping them maintain healthy and vibrant gardens.

Crop Protection Specialist

Crop Protection Specialist who incorporates Plantix into their workflow to efficiently identify and manage diseases in large-scale agricultural settings. They leverage the application to make informed decisions on treatment methods, contributing to sustainable and productive farming practices.

Botany Student

Botany Student who benefits from using Plantix to learn about plant diseases and their symptoms. They rely on the application for educational purposes, gaining insights into disease identification and contributing to their understanding of plant health.

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