

Plant Disease Detection Apps

CMPE 187 AI Test Modeling Report

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Team 1

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1. AI Function Test Requirement Analysis

This section will introduce the AI functional requirements for the apps we are testing. The primary feature of the apps is AI classification of plant diseases. The AI function was tested under various conditions such as picture clarity, zoom level, plant life stage, picture angle, and disease area.



FarmAssistX



Sick Plant Disease Identifier



PlantDiseaseIdentifier



PictureThis

Figure 1.1 Apps to be Tested

The above apps were selected as they all have the same plant disease identification feature.

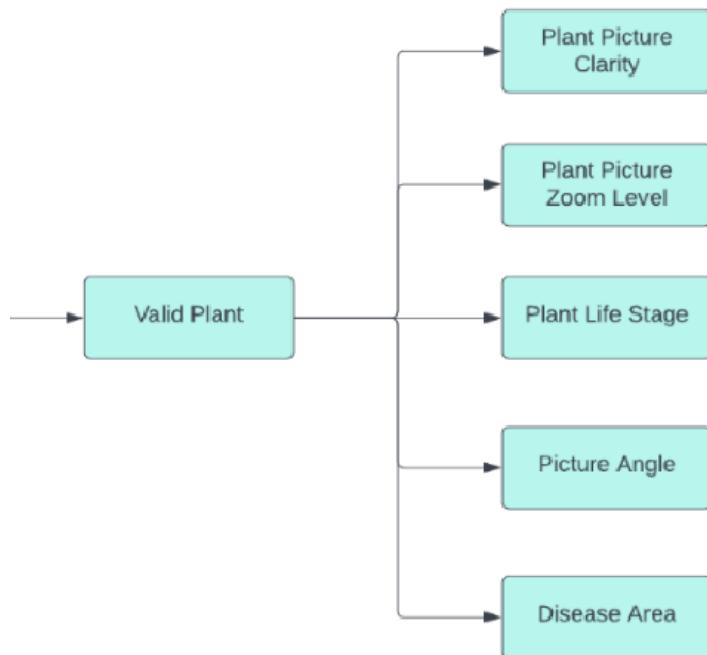


Figure 1.2 AI Plant Disease Identification Features

For our AI testing, our group will conduct various trials testing as to whether our selected applications (FarmAssistX, Sick Plant Disease Identifier, PlantDiseaseIdentifier, and PictureThis) can correctly identify the Potato Blight, Tomato Leaf Mold, Strawberry Leaf Scorch, and Corn Common Rust diseases. We will vary test conditions by testing photos with varying attributes: plant picture clarity, plant picture zoom level, plant life stage, picture angle, and disease area. We believe that testing using these varying attributes will give us a comprehensive understanding as to how accurate the selected AI applications are at detecting disease.

Chosen diseases:

- Potato blight
- Tomato leaf mold
- Strawberry leaf scorch
- Corn common rust

2. AI Test Modeling for AI Features

2.1 Context Modeling for AI Features

The Context Classification Spanning Tree is a crucial part of our Test Model because it illustrates how our testing criteria will be systematically organized. The four main categories for our testing are Plant Type, Disease Effect Area, Plant Life Stage, and Occurrence. The Plant Type category can be broken down into the Potato, Strawberry, Corn, and Tomato categories. The Disease Effect Area will be divided into either one spot of the disease, or multiple. The Plant life stage category was divided into a early and a late life category. The last category for our testing criteria is the Occurrence category, and that is divided up into the one leaf, one plant, and multiple plants subsections.

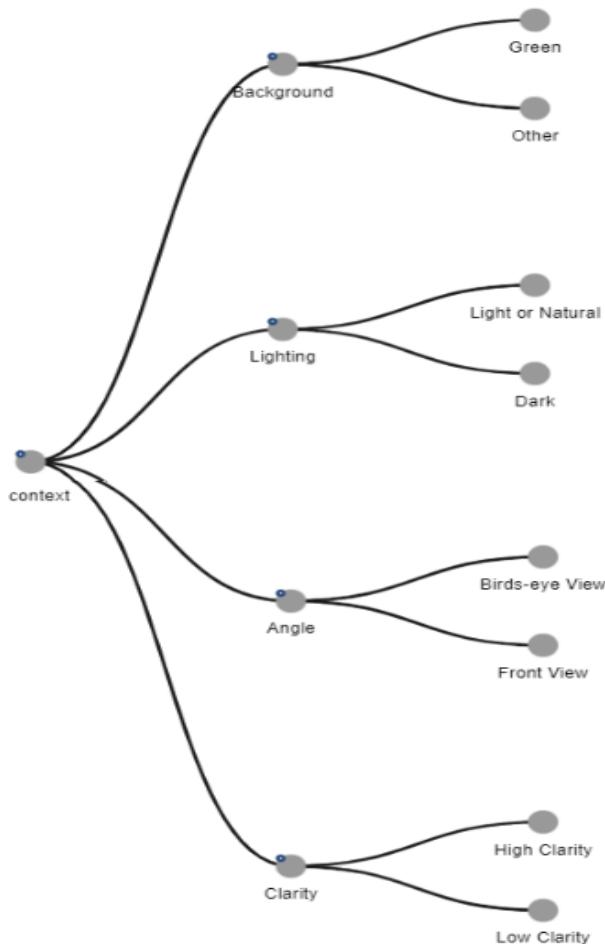


Figure 2.1 Context Classification Spanning Tree

2.2 AI-powered Function Input Classifications

This classification tree is used to encapsulate all the plant-specific information for our test cases. Plants can vary by type, disease effect area, life stage, and occurrence (how many plants in the test case are affected by a disease).

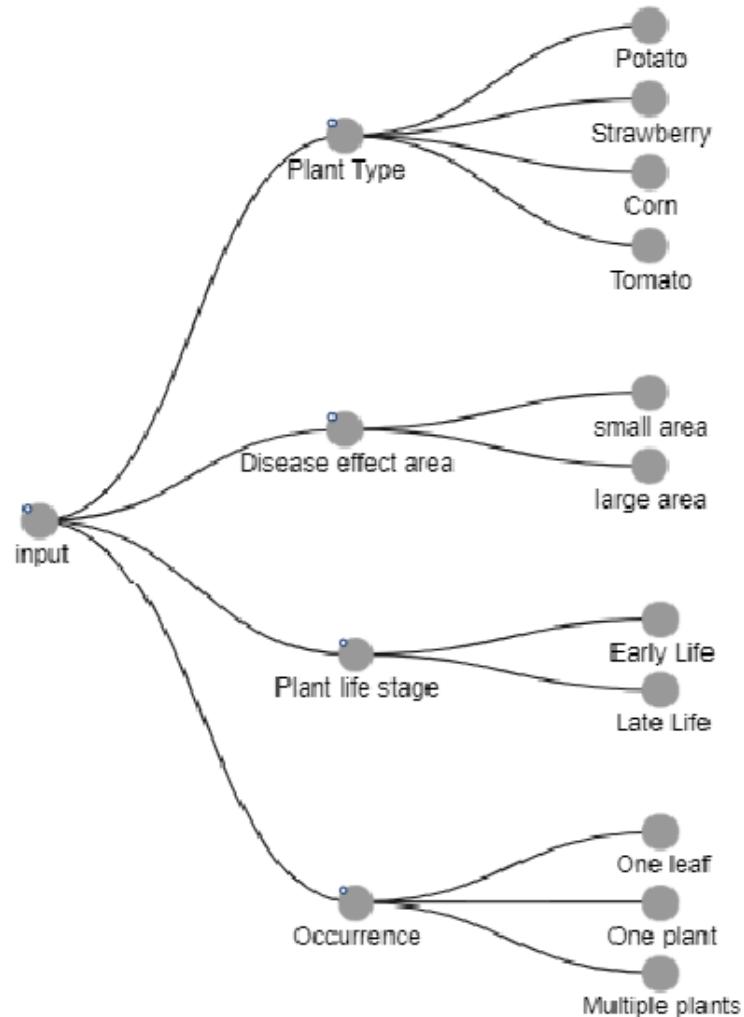


Figure 2.2 Input Classification Spanning Tree

2.3 AI-powered Function Output Classifications

A visual representation of all the possible outputs for our testing process are detailed in our Output Classification Spanning Tree. This ensures that our testing process yields results that are quantitative and free from ambiguity.

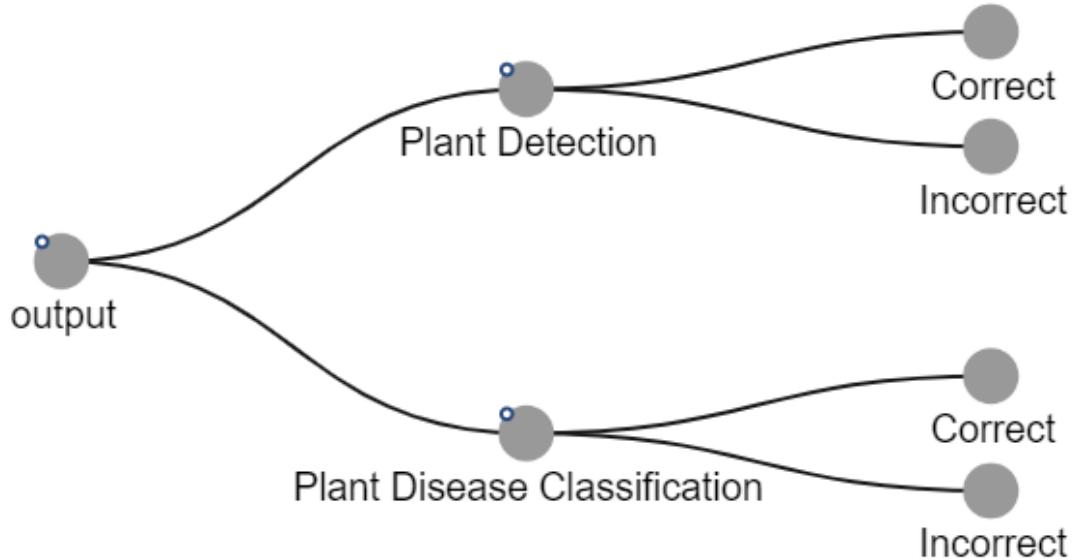


Figure 2.3 Output Classification Spanning Tree

2.4 AI powered Functions Classification Decision tables

Our 3D classification decision table provides a reference for every test case used in our testing process. Each row in this table is an individual attribute of a test case, and the rows represent a single test case. Below is our 3D classification decision table for our Plant Disease identifier applications.



Figure 2.4 3D Classification Decision Table

2.4.1 Context Spanning Table

ID	Angle	Background	Clarity	Lighting
C1	Birds-Eye View	Green	High	Light
C2	Birds-Eye View	Other	High	Light

C3	Front View	Green	High	Light
C4	Front View	Other	High	Light
C5	Front View	Other	High	Dark
C6	Front View	Other	Low	Light
C7	Front View	Other	Low	Dark

2.4.2 Input Spanning Table

ID	Plant Type	Disease effect area	Occurrence	Life Stage
I1	-	-	No Plant	-
I2			One plant	Early Life
I3	Potato	One Spot	One leaf	Late Life
I4	Tomato	One Spot	One plant	Late Life
I5	Potato	Multiple Spots	One leaf	Late Life
I6	Potato	Multiple Spots	One plant	Late Life
I7	Strawberry	Multiple Spots	One leaf	Late Life
I8	Strawberry	Multiple Spots	One plant	Late Life
I9	Corn	Multiple Spots	One leaf	Late Life
I10	Corn	Multiple Spots	One plant	Late Life
I11	Tomato	Multiple	One leaf	Late Life

		Spots		
I12	Tomato	Multiple Spots	One plant	Late Life

2.4.3 Output Spanning Table

ID	Plant Detection	Plant Disease Classification
O1	Correct	Correct
O2	Correct	Wrong
O3	Wrong	Wrong

2.4.4 Test Case Design

ID	Context Spanning Tree	Input Spanning Tree	Output Spanning Tree
T1	C1	I6	O1
T2	C7	I6	O1
T3	C4	I6	O1
T4	C5	I6	O1
T5	C4	I8	O1
T6	C6	I8	O1
T7	C3	I9	O1
T8	C4	I9	O1
T9	C2	I12	O1
T10	C4	I12	O1

T11	C4	I1	O1
T12	C4	I2	O1
T13	C4	I3	O1
T14	C4	I4	O1
T15	C4	I5	O1
T16	C4	I6	O1
T17	C4	I7	O1
T18	C4	I8	O1
T19	C4	I9	O1
T20	C4	I10	O1
T21	C4	I11	O1
T22	C4	I12	O1
T23	C2	I5	O1
T24	C2	I6	O1
T25	C2	I7	O1
T26	C2	I8	O1
T27	C2	I9	O1
T28	C2	I10	O1
T29	C2	I11	O1
T30	C2	I12	O1

3. AI Function Test Cases with Inputs/Outputs

3.1 Test Data Model

All our test data types are broken down into eight types: Disease effect areas (single, multiple), Input Size (one leaf, multiple leaves, entire plant, multiple plants), Occurrence (one plant, many plants), Life Stage (early life, late life), Angle (birds-eye view, front view), Background (green, color), Clarity (low, high), and Light (Bright, Dark).

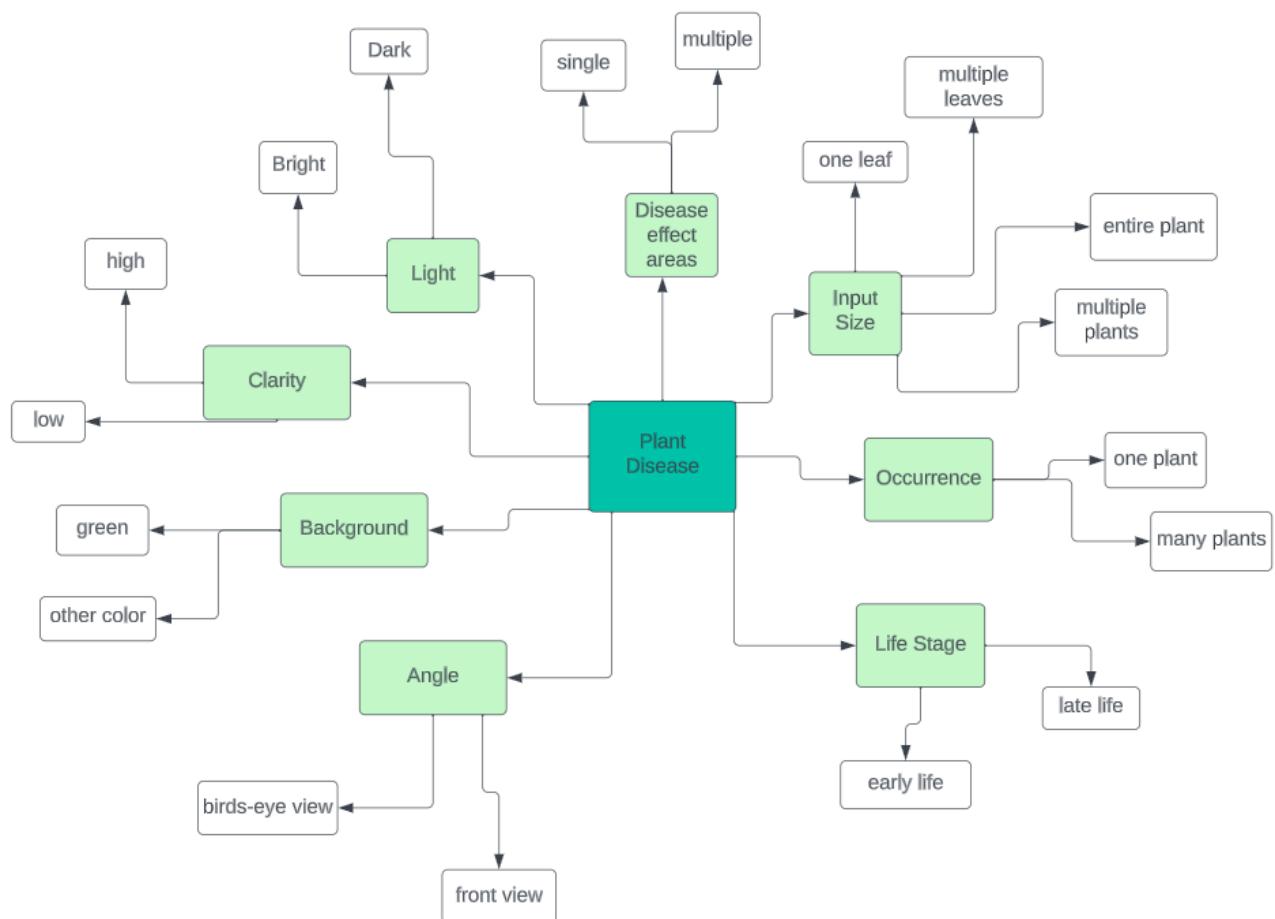


Figure 3.1 Test Data Model

3.2 Test Case

3.2.1 Context Test Cases

3.2.1.1 Outlier Test Cases

Test Case ID	T1 - T2
Test Classification	Context: Outliers
	-Birds eye view and green background -Dark lighting and low clarity

Test Case ID	T1			
Test Case Description	Birds-eye view, multiple spots, potato blight, green background			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023

Expected Result	Potato Early Blight	Potato Early Blight (Fungi)	Potato Plant - Blight	Potato Blight
Actual Result	Potato Early Blight	Potato Fungi (Most likely)	Potato Plant - Virus	This plant looks healthy!
Test Case Result	Pass	Pass	Fail	Fail

Test Case ID	T2			
Test Case Description	Low clarity, dark lighting, front view potato plant - blight			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Early Blight	Potato Early blight (Fungi)	Potato Plant - Blight	Potato Blight
Actual Result	Potato Early Blight	Kalanchoe	Groundcherry - Fungi	This plant

		(widow's thrill) Fungi (Most likely)		looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

3.2.1.2 Light Test Cases

Test Case ID	T3 - T4
Test Classification	Context: Lighting Front view, potato blight, high clarity

Test Case ID	T3			
Test Case Description	Potato blight, front view			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh

Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Early Blight	Potato Early Blight (Fungi)	Potato Plant - Blight	Potato Blight
Actual Result	Potato Early Blight	Uromyces viciae-fabae Fungi (Most Likely)	Elderflower - Fungus	This plant has Potato Blight!
Test Case Result	Pass	Fail	Fail	Pass

Test Case ID	T4			
Test Case Description	Potato plant blight, dark setting			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023

Expected Result	Potato Early Blight	Potato Early Blight (Fungi)	Potato Plant - Blight	Potato Blight
Actual Result	Potato Early Blight	Uromyces viciae-fabae Fungi (Most Likely)	Elderberry - Fungi	This plant looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

3.2.1.3 Clarity Test Cases

Test Case ID	T5 - T6
Test Classification	Context: Clarity Strawberry leaf scorch, high clarity and low clarity

Test Case ID	T5			
Test Case Description	Strawberry leaf scorch, high clarity			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Plant - Scorch	Strawberry Leaf Scorch
Actual Result	Strawberry Leaf Scorch	Phragmidium Fungi (Most Likely)	Strawberry Plant - Scorch	This plant has Leaf Scorch!
Test Case Result	Pass	Fail	Pass	Pass

Test Case ID	T6			
Test Case Description	Strawberry leaf scorch, low clarity			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Plant - Scorch	Strawberry Leaf Scorch
Actual Result	Strawberry Leaf Scorch	Phragmidium Fungi (Most Likely)	Strawberry Plant - Scorch	This plant looks healthy!
Test Case Result	Pass	Fail	Pass	Fail

3.2.1.4 Background Test Cases

Test Case ID	T7 - T8
Test Classification	Context: Background Corn common rust, green background and different color background

Test Case ID	T7
Test Case	Corn common rust, one leaf, green background

Description				
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn - Rust	Corn Common Rust
Actual Result	Corn Common Rust	Puccinia allii Fungi (Most Likely)	Puccina - Rust	This plant has Common Rust!
Test Case Result	Pass	Fail	Fail	Pass

Test Case ID	T8			
Test Case Description	Corn common rust, one leaf			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn - Rust	Corn Common Rust
Actual Result	Corn Common Rust	Garden Croton Fungi (Most Likely)	Elkhorn Fern - Fungi	This plant has Common Rust!
Test Case Result	Pass	Fail	Fail	Pass

3.2.1.5 Angle Test Cases

Test Case ID	T9 - T10
Test Classification	Context: Angle
	Tomato leaf mold, birds eye view and regular

Test Case ID	T9			
Test Case Description	Birds eye view, tomato leaf mold			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Healthy	Garden Tomato Fungi (Most Likely)	Tomato Leaf Mold	This plant has Leaf Mold!
Test Case Result	Fail	Pass	Pass	Pass

Test Case ID	T10			
Test Case Description	Tomato leaf mold, front view			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Healthy	Garden Tomato Viruses (Most Likely)	Nutrient Deficiency	This plant looks healthy!
Test Case Result	Fail	Fail	Fail	Fail

3.2.2 Input Test Cases

3.2.2.1 Outlier Test Cases

Test Case ID	T11 - T12
Test Classification	Context: Outliers Not a plant, baby plant

Test Case ID	T11			
Test Case Description	Not a plant			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Not a plant	Not a Plant	Not A Plant	Not a plant
Actual Result	Healthy	Plain earthtongue Your plant looks healthy!	Not A Plant	This plant looks healthy!
Test Case Result	Fail	Fail	Pass	Fail

Test Case ID	T12			
Test Case Description	Baby plant, strawberry leaf scorch			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch
Actual Result	Tomato Leaf Mold	Phragmidium Fungi (Most Likely)	Fungi	This plant has Leaf Scorch!
Test Case Result	Fail	Fail	Fail	Pass

3.2.2.2 Disease Effect Area Test Cases

Test Case ID	T13 - T14
Test Classification	Context: Disease Effect Area (One spot, or many spots) Potato blight/Tomato Leaf mold. Both with a singular disease spot High clarity and light

Test Case ID	T13			
Test Case Description	Potato blight, one singular spot on leaf, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Blight	Potato Early Blight (Fungi)	Potato Leaf - Blight	Potato Blight
Actual Result	Healthy	Groundcherry Fungi (Most Likely)	Potato - Blight	This plant has Potato Blight!
Test Case Result	Fail	Pass	Pass	Pass

Test Case ID	T14
Test Case Description	Tomato Leaf Mold, one singular spot on plant, front view, high clarity and light

App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Tomato Leaf Mold	Garden Tomato Fungi (Most Likely)	Tomato Leaf - Mold	This plant looks healthy!
Test Case Result	Pass	Pass	Pass	Fail

3.2.2.3 Plant type Test Cases (front view)

Test Case ID	T15 - T22
Test Classification	Context: Plant type (front view)
	Plant type varies, two test cases for each alternating between one leaf and entire plant. High clarity, light, and front view constant

Test Case ID	T15			
Test Case Description	Potato blight, multiple spots, one leaf, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Blight	Potato Blight	Potato Blight	Potato Blight
Actual Result	Potato Blight	Fissidens moss Fungi (Most Likely)	Tobacco - Fungi	This plant has Potato Blight!
Test Case Result	Pass	Fail	Fail	Pass

Test Case ID	T16
Test Case Description	Potato blight, multiple spots, one plant, front view, high clarity and light

App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Blight	Potato Blight	Potato Blight	Potato Blight
Actual Result	Healthy	Potato Fungi (Most Likely)	Potato Plant - Viruses	This plant looks healthy!
Test Case Result	Fail	Pass	Fail	Fail

Test Case ID	T17			
Test Case Description	Strawberry leaf scorch, multiple spots, one leaf, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch
Actual Result	Healthy	Phragmidium Fungi (Most Likely)	Fungi	This plant looks healthy!
Test Case Result	Fail	Fail	Fail	Fail

Test Case ID	T18			
Test Case Description	Strawberry leaf scorch, multiple spots, one plant, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch
Actual Result	Strawberry Leaf Scorch	Strawberry Fungi (Most Likely)	Strawberry Leaf - Scorch	This plant has Leaf Scorch!
Test Case Result	Pass	Pass	Pass	Pass

Test Case ID	T19			
Test Case Description	Corn common rust, multiple spots, one leaf, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
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Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn Common Rust	Corn Common Rust
Actual Result	Corn Common Rust	Dragon trees Fungi (Most Likely)	Sorghum - Fungi	This plant looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

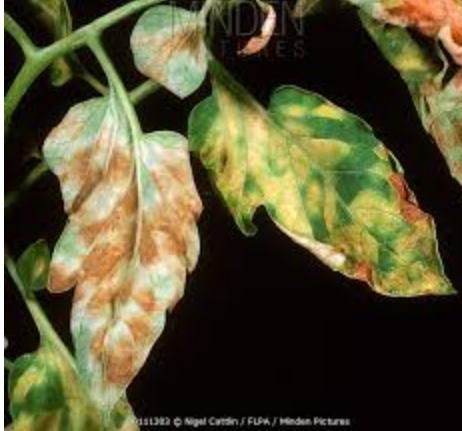
Test Case ID	T20			
Test Case Description	Corn common rush, multiple spots, one plant, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn Common Rust	Corn Common Rust
Actual Result	Healthy	Corn Your plant looks healthy!	Zea Mays - Healthy	This plant looks healthy!
Test Case Result	Fail	Fail	Fail	Fail

Test Case ID	T21			
Test Case Description	Tomato leaf mold, multiple spots, one leaf, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Tomato Leaf Mold	Intermediate polypody Nutrient Deficiency (Most Likely)	Puccina - Nutrient Deficiency	This plant looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

Test Case ID	T22			
Test Case Description	Tomato leaf mold, multiple spots, one plant, front view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Potato Blight	Orange-Yellow Rusts Fungi (Most Likely)	Bindweed - Fungi	This plant has Leaf Mold!
Test Case Result	Fail	Fail	Fail	Pass

3.2.1 Plant Type Test Cases (Birds-eye view)

Test Case ID	T23 - T30
Test Classification	<p>Context: Plant type (birds-eye view)</p> <p>Plant type varies, two test cases for each alternating between one leaf and entire plant. High clarity, light, and birds eye view constant</p>

Test Case ID	T23			
Test Case Description	Potato blight, multiple spots, one leaf, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input	 <i>GardenFocused.co.uk</i>			
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Blight	Potato Blight	Potato Blight	Potato Blight
Actual Result	Potato Blight	Garden Lettuce Fungi (Most Likely)	Brassica - Overwatering	This plant has Potato Blight!
Test Case Result	Pass	Fail	Fail	Pass

Test Case ID	T24	
Test Case	Potato blight, multiple spots, one plant, birds-eye view, high clarity and light	

Description				
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Potato Blight	Potato Blight	Potato Blight	Potato Blight
Actual Result	Healthy	Water Mint Fungi (Most Likely)	Potato Plant - Fungus	This plant has Potato Blight!
Test Case Result	Fail	Fail	Pass	Pass

Test Case ID	T25			
Test Case Description	Strawberry leaf scorch, multiple spots, one leaf, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch
Actual Result	Healthy	Phragmidium Fungi (Most Likely)	Henbit dead-nettle Fungi	This plant has Leaf Scorch!
Test Case Result	Fail	Fail	Fail	Pass

Test Case ID	T26			
Test Case Description	Strawberry leaf scorch, multiple spots, one plant, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch	Strawberry Leaf Scorch
Actual Result	Strawberry Leaf Scorch	Wild Strawberry Fungi (Most Likely)	Strawberry Plant - Fungi	This plant looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

Test Case ID	T27			
Test Case Description	Corn common rust, multiple spots, one leaf, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn Common Rust	Corn Common Rust
Actual Result	Healthy	Dragon trees Animalia (Most Likely)	Puccina - Sap-sucking pest	This plant looks healthy!
Test Case Result	Fail	Fail	Fail	Fail

Test Case ID	T28			
Test Case Description	Corn common rush, multiple spots, one plant, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Corn Common Rust	Corn Common Rust	Corn Common Rust	Corn Common Rust
Actual Result	Healthy	Red Pondweed Fungi (Most Likely)	Sorghum - thrips	This plant has Corn Common Rust!
Test Case Result	Fail	Fail	Fail	Pass

Test Case ID	T29			
Test Case Description	Tomato leaf mold, multiple spots, one leaf, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Tomato Leaf Mold	Puccinia arenariae Fungi (Most Likely)	Coleus nutrient - deficiency	This plant looks healthy!
Test Case Result	Pass	Fail	Fail	Fail

Test Case ID	T30			
Test Case Description	Tomato leaf mold, multiple spots, one plant, birds-eye view, high clarity and light			
App Name	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis

Test Case Input				
Performed By	Tejas Kulkarni	Nathan Kim	Mitchell Sayer	Umesh Singh
Execution Date	10/22/2023	10/22/2023	10/22/2023	10/22/2023
Expected Result	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold	Tomato Leaf Mold
Actual Result	Strawberry Leaf Scorch	Groundcherry Fungi (Most Likely)	Physalis - Bacteria	This plant looks healthy!
Test Case Result	Fail	Fail	Fail	Fail

Test Results Summary				
	FarmAssistX	Sick Plant Disease Identifier	PlantDiseaseIdentifier	PictureThis
Pass Rate	16/30	6/30	9/30	14/30
Pass Percentage	53.3%	20%	30%	46.6%