Use Cases & Test Cases

Date	07 December 2022
Team ID	PNT2022TMID26182
Project Name	Fertilizer Recommendation System for Disease Prediction

Use case Diagram

AGROFY - Usecase Diagram
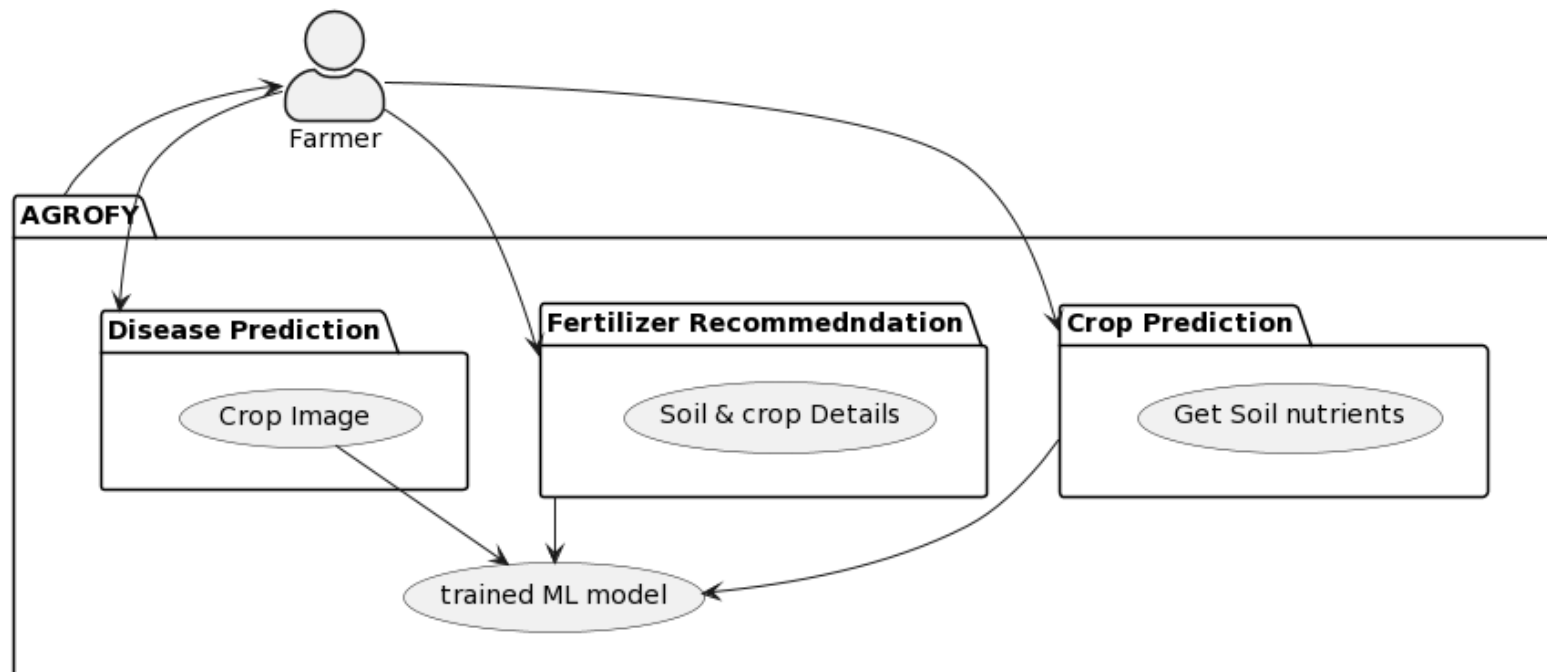
Use case Text

```
@startuml
title AGROFY - Usecase Diagram
skinparam actorStyle awesome
actor "Farmer" as f
package AGROFY as a{
  package "Crop Prediction" as cp{
    usecase "Get Soil nutrients"
  }
  package "Fertilizer Recommedndation" as fr{
    usecase "Soil & crop Details"
  }
  package "Disease Prediction" as dp{
    usecase "Crop Image" as ci
  }
  usecase "trained ML model" as ml
}
f-->cp
f-->fr
f-->dp
cp-->ml
fr-->ml
ci-->ml
a--->f
@enduml
```

TEST CASES

A test case is a specification of the inputs, execution conditions, testing procedure, and expected results that define a single test to be executed to achieve a specific software testing objective, such as exercising a specific programme path or verifying compliance with a specific requirement, in software engineering. Test cases underpin deliberate rather than chaotic testing. To get the appropriate coverage of the programme being tested, a battery of test cases can be created. Formally stated test cases enable the same tests to be performed against consecutive versions of software, enabling effective and consistent regression testing.

FORMAL TEST CASES

To completely verify that all of an application's criteria are satisfied, there must be at least two test cases for each requirement: one positive test and one negative test. If a requirement is broken down into sub-requirements, each one must contain at least two test cases. A traceability matrix is widely used to keep track of the relationship between the requirement and the test. Written test cases should include a description of the functionality to be tested as well as the preparation needed to ensure that the test can be run.

INFORMAL TESTING CASES

Test cases for applications or systems that lack formal requirements might be built based on the acknowledged typical be haviour of program of a comparable class. In some testing schools, test cases are not written at all, but the activities and results are given after the exams are completed.

Hypothetical tales are used in scenario testing to assist the tester in thinking through a complicated problem or system. Typically, these circumstances are not documented in any depth.

TEST CASES

TestcaseID	FeatureType	Component	TestScenario	Pre-Requisite	StepsToExecute	TestData	ExpectedResult	ActualResult	Status	Comments	TCforAutomation(Y/N)	BUGID	ExecutedBy
HomePage_TC_OO1	Functional	HomePage	Verifyuserisabletoseethehomepageornot.		1. EnterURLandclick go 2. verify whethertheuserisabletoseethehomepage.	EnterURLandclick go	Userabletoseethehomepage	Workingas expected	Pass	Nil	N	_	Santhosh M
HomePage_TC_OO2	UI	HomePage	VerifytheUIelementsinHomePage		1. EnterURLandclick go 2. VerifytheUIelementsinHomePage.	EnterURLandclick go	ApplicationshouldshowbelowUIelements:HomeTab&PredictTab	Working asexpected	pass	Nil	N	_	Navaneethakrishnan S
PredictPage_TC_OO3	Functional	Predictpage	Verifyuserisabletoredirecttopredict pageornot.		1. EnterURLandclickgo 2. ClickonPredictbutton 3. Verifywhethertheusertoredirecttopredictpage ornot.	Clickthepredictbuttoninhomepage	UsershouldnavigatetoPredictpage	Working asexpected	pass	Nil	N	_	Iswarya M
Predict Page_TC_OO4	UI	Predictpage	VerifytheUIelementsinPredictPage		1. EnterURLandclick go 2. VerifytheUIelements inPredictPage.	Clickthepredictbuttonandredirect topredictpage	ApplicationshouldshowbelowUIelements:DropdownList,UploadfileButton,Predictbutton.	Working asexpected	pass	Nil	N	_	Sabarivasan E
Predict Page_TC_OO5	Functional	Predictpage	Verifyuserisabletoselectthedropdownvalueornot.		1. EnterURLandclickgo 2. ClickonPredictbutton 3. Verifywhethertheusertoredirecttopredictpage ornot. 4. Verify userisabletoselectthedropdownvalueornot.	FruitorVegetable	Applicationshouldshowusertochoosefruitorvegetableoptionindropdown list.	Working asexpected	pass	Nil	N	_	Iswarya M
Predict Page_TC_OO6	Functional	Predictpage	Verifyuserisabletouploadtheimageornot.		1. EnterURLandclickgo 2. ClickonPredictbutton 3. Verifywhethertheusertoredirecttopredictpage ornot. 4. Verify userisabletoselectthedropdownvalueornot. 5. Verify userisabletouploadtheimagesornot	ImagestobeUploaded	Applicationshouldshowtheuploadedimage.	Working asexpected	pass	Nil	N	_	Sabarivasan E

PredictPage_TC_OO7	Functional	Predictpage	Verifywhethertheimageispredictedcorrectlyornot		1. EnterURLandclickgo 2. ClickonPredictbutton 3. Verifywhethertheusertoredirecttopredictpageornot.Verify userisabletoselectthedropdownvalueornot. 4. Verify userisabletouploadtheimagesornot 5. Verify whethertheimageispredictedcorrectlyornot	ClickthePredictButton	Applicationshowsthepredictedoutput	Working asexpected	pass	Nil	N	_	Navaneethakrishnan S