Use Case Documentation

Project Name: ***CROP PREDICTION BASED ON SOIL NUTRIENT ESTIMATION***
Motivation: *HELPING FARMERS TO MAXIMISE YEILD AND RETURNS*

Use Case name :

- ***FARMERS SUMITTING THE SOIL SAMPLE***

For each Use Case:

Use Case Name	*FARMERS SUBMITTING THE SOIL SAMPLE*
Description	*THE SOIL SAMPLE ALONG WITH THE DETAILS OF THE FARMER AND THE FARM ARE TAKEN AND THEN INFORMING THE FARMER ABOUT THE ESTIMATED RESULT DATE.*
Primary Actor(s)	*FARMER: HE IS THE ONE WHO COLLECTS THE SOIL SAMPLE FROM HIS FARM AND SUBMITS THE SAMPLE FOR THE TEST.* *CLERK (AT THE TEST CENTER): HE IS THE ONE WHO COLLECTS THE SOIL SAMPLE DIRECTLY FROM THE FARMER AND SENDS THE SAMPLE FOR THE NUTRIENT TEST.*
Secondary Actor(s)	*RESEARCHERS: HE IS NOT THE PERSON WHO WILL DIRECTLY INTERACT WITH THE FARMER HE WILL CARRY OUT THE NUTRIENT TEST FOR THE SAMPLE HE RECIEVES FROM THE HELP DESK.* *DATA ANALYST: HE IS THE ONE WHO ANALYSES THE NUTRIENT STATS OF THE SOIL WORKED OUT BY THE RESEARCHER AND PREPARES THE REPORT ON THE SOIL*
Pre-condition	• *THE SOIL SAMPLE SHOULD BE SENT TO AND TESTED BY THE RESEARCHER BEFORE THE SOIL LOSES ITS NUTREINTS.* • *THE NUTRIENTS STATS OF THE SOIL SHOULD BE UPDATED IN THE DATABASE FOR FURTHER USE.* • *RESULTS TO BE PUBLISHED AND REPORTED TO THE FARMER ATLEAST ON THE DATE OF ESTD.RESULT DATE GIVEN TO THE FARMER.*
Post-condition	• *REPORTS OF THE SOIL TEST WILL BE HANDED OVER TO THE FARMER ON THE ESTD.RESULT DATE.* • *SINCE THE RESEARCHER CAN BE CONSIDERED AS ANOTHER SYSTEM, CLERK SENDING THE REPORT TO THE*

	RESEARCHER CAN ALSO BE CONSIDERED AS A POST CONDITION.
Trigger	• *EXTERNAL EVENTS: FARMER REQUESTS THE SOIL TEST CENTER TO TEST HIS SOIL SAMPLE.*
Stakeholders	*FARMER*

Normal Scenario

1.	*FARMER APPROACHES THE SOIL TEST CENTER AND REQUESTES THE CLERK FOR THE SOIL TEST.*
2.	*CLERK COLLECTS THE DETAILS OF THE FARMER WITH HIS FARM AND COLLECTS THE SOIL SAMPLE.*
3.	*CLERK SENDS THE SOIL SAMPLE COLLECTED FROM THE FARMER TO THE SOIL TEST.*
4.	*THE RESEARCHER PROCESSESS THE SOIL NUTRIENT TEST AND NOTES DOWN THE STATISTICS OF EACH DIFFERENT NUTRIENT THAT THE SOIL HAS*
5.	*THE DATA ANALYST NOW ANALYSES THE STATISTICS NOTED DOWN BY THE RESEARCHER AND PREPARES THE REPORT.*

Alternate Scenario/Extension/Exceptions

1.	***EXCEPTION:*** *IF THERE ARE NO OF SAMPLES COLLECTED ARE MORE THEN SOIL MAY LOSE ITS NUTRIENTS AND REPORTS GENERATED WILL NOT BE PRECISE. IF THE TEST CENTER IS CLOSED DUE TO SOME REASON THEN THE FARMER CANNOT SUBMIT HIS SOIL SAMPLE.*
2.	***ALTERNATE:*** *IF THE SIMILAR TYPE OF SOIL IS FOUND IN THE DATABASE THEN RESULTS CAN DIRECTLY BE GENERATED WITHOUT PERFORMING NUTRIENT TESTS WHICH WILL SAVE TIME.*

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