

Use Case Tables

1. Register

Field	Description
Name	Register
Actor	Farmer / Agriculture Engineer
Goal	Create a new account
Pre-condition	User is not registered
Post-condition	Account is created and user can login
Main Flow	Enter data → System validates → Account created
Alternative	Email already exists → Show error

2. Login

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Access the system
Pre-condition	User has an existing account
Post-condition	User enters dashboard
Main Flow	Enter email & password → Login
Exception	Incorrect password

3. Logout

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Exit the system
Pre-condition	User is logged in
Post-condition	User returns to home page
Main Flow	Click Logout

4. Add Farm

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	Add a new farm
Pre-condition	User is logged in
Post-condition	Farm is added
Main Flow	Enter farm data → Save
Extension	View Farm

5. View Farm

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	View farm details
Pre-condition	Farm exists
Post-condition	Details displayed
Main Flow	Click View Farm
Extensions	Add schedule / Add plant / Update farm / Delete farm

6. Update Farm

Field	Description
Actor	Farmer
Goal	Modify farm data
Pre-condition	Farm exists
Post-condition	Farm updated
Main Flow	View Farm → Edit → Save

7. Delete Farm

Field	Description
Actor	Farmer
Goal	Remove a farm
Pre-condition	Farm exists
Post-condition	Farm deleted
Main Flow	View farm → Delete

8. Add Schedule Plan

Field	Description
Actor	Farmer
Goal	Add planting schedule
Pre-condition	Farm exists
Post-condition	Schedule added
Main Flow	View farm / Add Yearly plants / Add fertilizers / Add planting dates

9. Add Plant

Field	Description
Actor	Farmer
Goal	Add a plant
Pre-condition	Farm exists
Post-condition	Plant added to farm
Main Flow	View farm -> Select plant -> Click Add Plant

10. Delete Plant

Field	Description
Actor	Farmer
Goal	Delete a plant
Pre-condition	Plant exists
Post-condition	Plant removed
Main Flow	Click Delete Plant

11. Upload Photo

Field	Description
Actor	Farmer
Goal	Upload plant image
Pre-condition	Plant exists
Post-condition	Image uploaded -> response by report
Main Flow	Select image → Upload
Include	View Report

12. View Report

Field	Description
Actor	Farmer / Agriculture Engineer
Goal	View analysis report
Pre-condition	Uploaded image available
Post-condition	Report displayed
Include	Pest Detection API, Disease Detection API

13. Pest Detection API – Give Report

Field	Description
Actor	Pest Detection API
Goal	Detect pests from image
Pre-condition	Image received
Post-condition	Report returned
Main Flow	Analyze image → Return data

14. Disease Detection API – Give Report

Field	Description
Actor	Disease Detection API
Goal	Detect diseases in plant
Pre-condition	Image received
Post-condition	Report returned
Main Flow	Analyze → Return output

15. Treatment Recommendation API – Give Treatment

Field	Description
Actor	Treatment Recommendation API
Goal	Provide treatment recommendation
Pre-condition	Disease report available
Post-condition	Treatment shown
Main Flow	Generate recommendation → Return

16. Ask Questions

Field	Description
Actor	Farmer
Goal	Ask chatbot questions
Pre-condition	User logged in
Post-condition	Question sent
Main Flow	Enter question → Send
Include	Chatbot API – Give answers

17. Chat (Farmer ↔ Engineer)

Field	Description
Actors	Farmer & Agriculture Engineer
Goal	Direct communication
Pre-condition	Access granted
Main Flow	Send/receive messages

18. Give Access to Farm

Field	Description
Actor	Farmer
Goal	Allow engineer to view farm
Pre-condition	Engineer exists
Post-condition	Engineer gains access
Main Flow	Select engineer → Give access

19. Add Blog

Field	Description
Actor	Agriculture Engineer
Goal	Publish article
Pre-condition	Logged in
Post-condition	Blog published
Main Flow	Write → Post

20. View Blog

Field	Description
Actor	Farmer
Goal	View blog posts
Main Flow	Open blogs page

21. Weather Prediction Replay

Field	Description
Actor	Weather API
Goal	Send weather prediction
Include	Plant Recommendation

22. Give Plant Recommendation

Field	Description
Actor	Plant Recommendation API
Goal	Suggest suitable plants
Pre-condition	Weather data available
Post-condition	Recommendation returned
Main Flow	Analyze → Output