

Test Cases Document

Software Test Plan

S. No	Description	Test Engineer	Start Date	End Date
1	Login & Signup (Farmer Account Creation and Authentication)	Muhammad Mujtaba	03-June-2025	04-June-2025
2	Add New Animal Profile (Cow Data Entry: Name, Tag, DOB, Breed)	Hamza Bin Asif	05-June-2025	05-June-2025
3	Daily Symptom Selection (Toggle Buttons for Health Data Collection)	Hamza Bin Asif	06-June-2025	06-June-2025
4	Disease Prediction (Based on Selected Symptoms)	Hamza Bin Asif	07-June-2025	07-June-2025
5	Health Recommendations Display (Tailored Advice Post-Prediction)	Muhammad Mujtaba	08-June-2025	08-June-2025
6	Cow Health Profile (View Health History, Disease Records)	Muhammad Mujtaba	09-June-2025	09-June-2025
7	Report Generation (Daily Health Report Summary)	Muhammad Mujtaba	10-June-2025	10-June-2025
8	Export Health Reports (PDF and CSV Formats)	Muhammad Mujtaba	11-June-2025	11-June-2025
9	Connectivity Handling	Hamza Bin Asif	13-June-2025	13-June-2025
10	Help Section Access (FAQs, Tutorials, Contact)	Maryam Nadeem	14-June-2025	14-June-2025

11	App Logo Navigation (Redirect to Dashboard/Home)	Maryam Nadeem	14-June-2025	14-June-2025
----	--	---------------	--------------	--------------

Test Cases (for screen/reports)

Project Name: Farmware

Iteration No: 01

Test Engineer: Muhammad Mujtaba

Date: 03-Jan-2025

Test Scenario: **Login & Signup (Farmer Account Creation and Authentication)**

Test Case Description: To verify that the login and signup functionality works correctly for farmers, including proper input validation, error handling, and successful account creation and authentication.

Test Cases for Login

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass /Fail
TC-01	Leave email and password fields empty and click login	Empty fields	Error: "Fields cannot be empty."	Error: "Fields cannot be empty."	Pass
TC-02	Enter invalid email format and click signup	Email: farmer123.com, Password: abc123	Error: "Please enter a valid email address."	Error: "Please enter a valid email address."	Pass
TC-03	Enter weak password during signup	Email: farmer@test.com , Password: 123	Error: "Password must be at least 6 characters."	Error: "Password must be at least 6 characters."	Pass
TC-04	Enter existing email during signup	Email: existing@test.com , Password: abc123	Error: "Email already registered."	Error: "Email already registered."	Pass

TC-05	Enter valid credentials and click signup	Email: newfarmer@test.com , Password: farm1234	Signup successful. Redirect to dashboard.	Signup successful. Redirect to dashboard.	Pass
TC-06	Enter wrong credentials during login	Email: farmer@test.com , Password: wrongpass	Error: "Incorrect email or password."	Error: "Incorrect email or password."	Pass
TC-07	Enter valid credentials and click login	Email: farmer@test.com , Password: farm1234	Login successful. Redirect to dashboard.	Login successful. Redirect to dashboard.	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Iteration No: 01

Test Engineer: Hamza Bin Asif

Date: 13-01-2025 Test

Scenario: **Adding New Animal**

Test Case Description: To verify that a farmer can add a new cow's profile by correctly filling out all required fields and that the system validates and saves the data accurately.

Test Cases for Adding New Animal

	Steps	Input Data	Expected Result	Actual Result	Pass /Fail
TC-08	Leave all fields empty and click submit	Empty fields	"Next" button disabled until all required fields are filled.	"Next" button disabled until all required fields are filled.	Pass
TC-09	Enter only cow id and try to submit	Name: "254", other fields empty	"Next" button disabled until all required fields are filled.	"Next" button disabled until all required fields are filled.	Pass

TC-10	Enter invalid date format in DOB field	DOB: "32-13-2025"	Error: "Invalid date format."	The app uses calendar for selection of date so invalid date format can't be filled in anyway.	Pass
TC-11	Enter past date in correct format	DOB: "01-05-2020"	Date accepted	Date accepted	Pass
TC-12	Enter duplicate tag number	Tag: "COW001" (already exists in DB)	Error: "Tag already exists."	Error: "Tag number already registered."	Pass
TC-13	Enter unique tag, valid DOB, and select breed	Tag: "COW007", DOB: "10-04-2022", Breed: "Sahiwal"	Cow profile added successfully. Redirect to home	Cow profile added successfully. Redirect to home	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Iteration No: 01

Test Engineer: Hamza Bin Asif

Date: 13-01-2025

Test Scenario: **Symptoms Selection**

Test Case Description: To verify that farmers can select symptoms using toggle buttons and submit daily health data for a cow, ensuring that selected symptoms are saved correctly and reflected in the system.

Test Cases for Symptom Selection

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass /Fail
TC-14	Open daily health form without selecting a cow	No cow selected	Error: "Please select a cow before proceeding."	When navigating to disease prediction page through sidebar, it asks to choose cow.	Pass

TC-15	Select a cow but submit form without selecting any symptoms	Cow selected, symptoms not selected	Error: "Select at least one symptom to proceed."	The form will not proceed.	Pass
TC-16	Select multiple symptoms using toggle buttons and submit	Cow: "123", Symptoms: "Cough", "Lethargy"	Data saved successfully. Confirmation message displayed.	Data saved successfully. Confirmation message displayed.	Pass
TC-17	Deselect all symptoms after selecting and try submitting	Cow: "124", Symptoms selected and then all deselected	Error: "Select at least one symptom to proceed."	The form will not proceed.	Pass
TC-18	Select symptoms and disconnect internet before submitting	Symptoms: "Diarrhea", No internet	Error: "No internet connection. Please try again later."	Error: "No internet connection. Please try again later."	Pass
TC-19	Select symptoms and submit, then revisit form to ensure they persisted	Cow: "234", Symptoms: "Cough", "Lethargy"	Previously selected symptoms are still shown for that day	Previously selected symptoms are still shown for that day	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Iteration No: 01

Test Engineer: Hamza Bin Asif

Date: 13-01-2025

Test Scenario: **Disease Prediction Based on Selected Symptoms**

Test Case Description: To verify that the system correctly analyzes selected symptoms and generates accurate disease predictions within the expected time limit.

Test Cases for Predictions

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
TC-01	Attempt disease prediction without selecting any symptoms	Cow selected, symptoms not selected	Error: "No symptoms selected. Please select symptoms to get predictions."	The form won't proceed further	Pass
TC-02	Select common symptoms and request prediction	Cow: "567", Symptoms: "Cough", "Fever"	Prediction generated within 15 seconds showing probable disease	Prediction generated in 12 seconds showing probable disease	Pass
TC-03	Select rare/uncommon symptoms and request prediction	Cow: "123", Symptoms: "Swelling", "Infertility"	System displays lesser-known possible diseases or alerts for rare case	System tries to predict the disease but also gives a warning in the end to consult a doctor	Pass
TC-04	Trigger disease prediction with intermittent internet connectivity	Cow: "123", Symptoms selected, unstable connection	Error: "Connection lost. Please retry." or retry automatically after delay	Displayed "Retrying..." and successfully submitted after reconnection	Pass
TC-05	Select symptoms, request prediction, and check result format	Cow: "123", Symptoms: "Cough", "Lethargy"	Clear, user-friendly result format with icons and summary	Prediction displayed with icons and summary cards for each disease	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Test Engineer: Muhammad Mujtaba

Iteration No: 01

Date: 13-01-2025

Test Scenario: **Health Recommendations**

Display

Test Case Description: To verify that the system displays appropriate, clear, and actionable health recommendations after predicting diseases based on selected symptoms.

Test Cases for Health Report

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
TC - 01	View recommendations after successful disease prediction	Cow: "234", Predicted Disease: "Mastitis"	Display advice: e.g., isolate cow, monitor milk quality, contact veterinarian	Displayed correct advice for Mastitis	Pass
TC - 02	Trigger prediction and view if advice uses easy-to-understand terms	Cow: "44", Disease: "Lameness"	Display in layman's terms (e.g., "Give soft bedding", "Limit cow's movement")	Clear, farmer-friendly language used	Pass
TC - 03	Check if recommendations are visually accessible (font/icons/colors)	Any cow/disease	Advice should be in readable font, with colored tags/icons if applicable	Recommendations were visually clear and readable	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Test Engineer: Muhammad Mujtaba

Test Scenario: **Cow Health Profile**

Iteration No: 01

Date: 13-01-2025

Test Case Description: To ensure users can successfully view the complete health history and disease records of individual cows, with accurate data presentation and proper date-wise tracking.

Test Cases for Cow Health Profile

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
TC-01	Navigate to a specific cow's profile	Cow: "4"	Display cow details and full health history	Health profile and disease records shown correctly	Pass
TC-02	View disease records sorted by date	Cow: "56"	Most recent disease appears last	Records sorted correctly by date	Pass
TC-03	Check if history includes both symptoms and predictions	Cow: "1"	History shows symptoms and corresponding predictions	Symptoms and predictions were both included in history	Pass
TC-04	Open profile for a cow with no health data	N/A	Message: "No health data available yet."	Correct empty state message shown	Pass
TC-05	Search for cow profile using tag number	Tag: 345	Matching cow profile is retrieved	Correct profile shown using tag search	Pass
TC-07	View history after a connectivity issue is resolved	Intermittent internet	Data should reload or user should be prompted to retry	System handled reconnection gracefully	Pass
TC-08	Attempt to view profile without login	Not logged in	Redirect to login page	Unauthorized access blocked; redirected to login	Pass

Test Cases (for screen/reports)

Project Name: Farmware
Test Engineer: Muhammad Mujtaba
Test Scenario: **Report Generation**

Iteration No: 01
Date: 13-01-2025

Test Case Description: To verify that the system correctly generates a daily health report summary for each cow after symptom submission and disease prediction, displaying all relevant health metrics clearly.

Test Cases for Health Report Generation

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass /Fail
TC-01	Submit daily symptoms for a cow and trigger report generation	Cow: "12" + symptoms	Report generated including cow info, symptoms, prediction, and recommendations	Report generated correctly with all details	Pass
TC-02	Generate report for a cow with no symptoms selected	Cow: "12" (no symptoms)	Message: "No symptoms selected. Report not generated."	The form won't proceed if the symptoms are not selected	Pass
TC-03	View report for a previous date	Date: 08-Jan-2025	Report displays data from the selected date	Correct historical report shown	Pass
TC-04	Attempt to generate report without internet	Offline mode	Error: "Check your connection and try again."	Connection error message shown	Pass
TC-05	Generate report and verify timestamp and cow tag	Cow: "23"	Report includes date of submission and tag number	Timestamp and tag were correct	Pass
TC-06	Generate multiple reports and verify pagination	Multiple cows	Reports paginated or scrollable for better readability	UI handled multiple reports properly	Pass

TC-07	Verify accuracy of symptom list and disease result in the report	Cow: "76" + 3 symptoms	Report matches selected symptoms and predicted disease	Data accuracy confirmed	Pass
TC-08	Check report formatting (alignment, fonts, sections)	N/A	Neatly formatted sections: cow info, symptoms, prediction, advice	Formatting was clean and sections well defined	Pass

Test Cases (for screen/reports)

Project Name: Farmware

Iteration No: 01

Test Engineer: Hamza Bin Asif

Date: 13-01-2025

Test Scenario: Connectivity Handling

Test Case Description: To ensure the system can detect and handle internet connectivity issues gracefully during operations such as symptom submission, report generation, or profile viewing—without data loss or app crashes.

Test Cases for Health Report

TC ID	Steps	Input Data	Expected Result	Actual Result	Pass /Fail
TC-01	Open app with active internet	Internet ON	App loads and remains on home screen	App loads normally	Pass
TC-02	Disconnect internet and try to submit daily symptoms	Cow: "Molly" + 2 symptoms	App returns to home screen, does not allow submission	App returned to home screen	Pass
TC-03	View cow health profile with no internet	Select cow profile	App returns to home screen	App returned to home screen	Pass
TC-04	Generate report while internet is off	Open report section	App returns to home screen	App returned to home screen	Pass

TC-05	Toggle internet off while filling form	Mid-form	App detects disconnect, returns to home screen	App returned to home screen	Pass
TC-06	Open help section without internet	Help tab	App returns to home screen	App returned to home screen	Pass
TC-07	Reconnect to internet after disconnect	Reconnect internet	App requires manual refresh or relaunch to function again	App stays on home until refreshed	Pass
TC-08	Open app without internet	Launch app	App loads to home, remains idle or blocked until internet resumes	App blocks interaction, waits online	Pass
TC-09	Navigate to any feature while offline	Any section	App prevents access and returns to home	App returned to home screen	Pass
TC-10	Ensure app does not crash on disconnect	Disconnect abruptly	App stays stable (no crash), even if returned to home	App stable, no crash	Pass