

Test Case	
Project Name	Student Biometrics Attendance
Module Name	Attendance page
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Scenario TID	Scenario Description	Test Case ID	Pre Condition	Steps to Execute	Expected Result	Actual Result	Status	Executed QA Name	Misc (Comments)
1	Successful Biometric Authentication and Attendance Marking	TC_BIO_001	Student biometric data is pre-registered in the system.	Student places their finger on the biometric scanner. System scans the fingerprint. The system matches the fingerprint with the registered data. If matched, the system marks attendance.	The system successfully authenticates the student and displays a confirmation message that attendance is marked.	The system authenticated the student and displayed the message "Attendance Successfully Marked".	Pass	John Doe	Test performed on Device Model XYZ, Firmware Version 2.1
2	Biometric Authentication Failure - Unregistered Student		Student biometric data is not registered in the system.	Unregistered student tries to scan their fingerprint.	The system displays an error message stating that the student is not registered, and attendance is not marked.	The system displayed "Biometric Data Not Found. Please Contact Admin."	Pass		
3	Duplicate Attendance Attempt	TC_BIO_002	Student has already marked attendance for the day.	Student scans their fingerprint a second time on the same day. The system checks if attendance for the day is already marked.	The system displays a message indicating that attendance is already recorded for the day.	The system displayed "Attendance Already Recorded for Today."	Pass	Jane Smith	Tested with multiple unregistered fingerprints to ensure consistency.
4	System Behavior with Partial Fingerprint Scan	TC_BIO_003	Student's biometric data is registered	Student scans their fingerprint a second time on the same day. The system checks if attendance for the day is already marked.	The system displays a message indicating that attendance is already recorded for the day.	The system displayed "Attendance Already Recorded for Today."	Pass	John Doe	Test repeated after 5 minutes and after system refresh to ensure consistency.
5	Biometric Device Disconnection/Error Handling	TC_BIO_004	Biometric scanner is disconnected or malfunctioning.	Student places only part of their finger or an unclear print on the scanner.The system attempts to match the fingerprint	The system fails to authenticate and prompts the student to try again.	The system displayed "Fingerprint Not Recognized. Please Try Again."	Pass	Alice Brown	Tested with wet and dry fingers to check sensitivity.
6	Multiple Students Attempting Attendance Simultaneously	TC_BIO_005	Multiple students are present and attempting to scan fingerprints.	Student tries to scan their fingerprint.The system attempts to read from the scanner.	The system displays an error message indicating that the biometric device is not connected or not functioning.	The system displayed "Biometric Device Not Detected. Please Check Connection."	Pass	Jane Smith	Tested with both physical disconnection and software-induced malfunction.
7	Attendance Marking During Power Failure	TC_BIO_006	System is running, and attendance is being marked.	Multiple students place their fingers on different scanners (or sequentially if only one scanner is available).The system processes each fingerprint	The system displays an error message indicating that the biometric device is not connected or not functioning.	The system displayed "Biometric Device Not Detected. Please Check Connection."	Pass	Alice Brown	Test conducted with 10 students in quick succession.
8	Unauthorized User Trying to Access Attendance Data	TC_BIO_007	System is running, and attendance is being marked.	Student scans their fingerprint. Power goes out before confirmation.	The system should either save the last successful attendance mark or prompt the student to re-scan once the power is restored.	The system required the student to re-scan after power was restored. No partial data was saved.	Pass	John Doe	Test performed with UPS backup to simulate real-time recovery
		TC_BIO_008	System is running with user authentication in place.	An unauthorized user attempts to access the attendance data through the system or backend.	The system denies access and logs the unauthorized attempt.	The system displayed "Access Denied" and logged the unauthorized attempt in the security logs.	Pass	Jane Smith	Attempted access through both front-end UI and direct database access.