

Test Case Planning

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1. Use Case 1 - <<Track Missed Doses>>

Test Case ID	TC01 -Positive Test Case (Detect Missed Dose Automatically)	
Test Objective	Verify that the system correctly identifies and records a missed dose when the scheduled time passes without a logged taken entry.	
Preconditions	<ul style="list-style-type: none">The application should be running.Patient P1 exists in the system.Prescription# 1 exists for P1 with a scheduled dose time: 8 AM.The current time is 08:30 AM, and no dose has been logged yet.	
Test steps	<p>Run the “Check Missed Doses” function</p> <p>- once written out/implemented</p> <p>The system should compare the current time with each scheduled medication time.</p> <p>It should find that P1 didn’t log the dose for Prescription# 1 by 08:00 AM.</p> <p>The system should mark that dose as “missed” and save it in the patient’s record.</p>	
Input Values	FIELD	VALUE
	Patient ID	P1
	Prescription number	1
	Scheduled Time	08:00
	Current time	08:30
	Dose Logged	NO
Expected results	<p>The system will show a message like: “Missed dose detected for Prescription# 1 (P1).”</p> <p>The system will store this dose as “missed” with a timestamp and reason.</p> <p>The missed dose will show up in the patient’s medication history or summary list.</p>	

Test Case ID	TC02 -Negative Test Case (Incorrect Time Comparison)	
Test Objective	To make sure the system doesn't mark a dose as missed if it was logged on time or before the scheduled time.	
Preconditions	Application is running. Patient P1 exists. Prescription# 1 is scheduled for 08:00 AM. The patient logged the dose at 07:59 AM which is on time.	
Test steps	Run "Check Missed Doses." The system will compare the scheduled time and the actual log time. It should see that the dose was taken on time. No "missed dose" should be added.	
Input Values	FIELD	VALUE
	Patient ID	P1
	Prescription number	1
	Scheduled Time	08:00
	Current time	07:59
	Dose Logged	YES
Expected results	The system should show: "No missed doses detected for P1." Nothing new is added to the missed dose list. The system keeps the log marked as "taken."	

Test Case ID	TC03 - Boundary Test Case (Same-Minute Grace Limit)
Test Objective	To check if the system accepts a dose that is logged exactly at the scheduled time (the boundary point) as being on time.

Preconditions	<p>Application is running.</p> <p>Patient P1 exists.</p> <p>Prescription# 1 is scheduled for 08:00 AM.</p> <p>The patient logs the dose at 08:00 AM exactly.</p>												
Test steps	<p>Run “Check Missed Doses.”</p> <p>The system will compare the scheduled and logged times.</p> <p>It will see that both times are the same.</p> <p>The dose should count as on time.</p>												
Input Values	<table> <thead> <tr> <th>FIELD</th><th>VALUE</th></tr> </thead> <tbody> <tr> <td>Patient ID</td><td>P1</td></tr> <tr> <td>Prescription number</td><td>1</td></tr> <tr> <td>Scheduled Time</td><td>08:00</td></tr> <tr> <td>Current time</td><td>08:00</td></tr> <tr> <td>Dose Logged</td><td>YES</td></tr> </tbody> </table>	FIELD	VALUE	Patient ID	P1	Prescription number	1	Scheduled Time	08:00	Current time	08:00	Dose Logged	YES
FIELD	VALUE												
Patient ID	P1												
Prescription number	1												
Scheduled Time	08:00												
Current time	08:00												
Dose Logged	YES												
Expected results	<p>The system will treat the dose as “taken” not missed.</p> <p>No missed entry should be made.</p> <p>The patient’s history should still show “taken” for Prescription# 1.</p>												

Test Case ID	TC04 - Negative Test Case (Missing Prescription Data)
Test Objective	To check what happens if the prescription is missing required information like the scheduled time.
Preconditions	<p>Application is running.</p> <p>Patient P1 exists.</p> <p>Prescription# 2 exists, but the “scheduled time” field is empty.</p>

Test steps	Run “Check Missed Doses.” The system tries to read the scheduled time for Prescription# 2. Since it’s empty, it can’t compare the times. The system should handle this with a clear error message.	
Input Values	FIELD	VALUE
	Patient ID	P1
	Prescription number	2
	Scheduled Time	empty
	Current time	07:59
	Dose Logged	YES
Expected results	The system should display: “Scheduled time missing for Prescription# 2.” It shouldn’t record anything as missed since it can’t verify it. The doctor or admin should be prompted to fix the prescription data.	