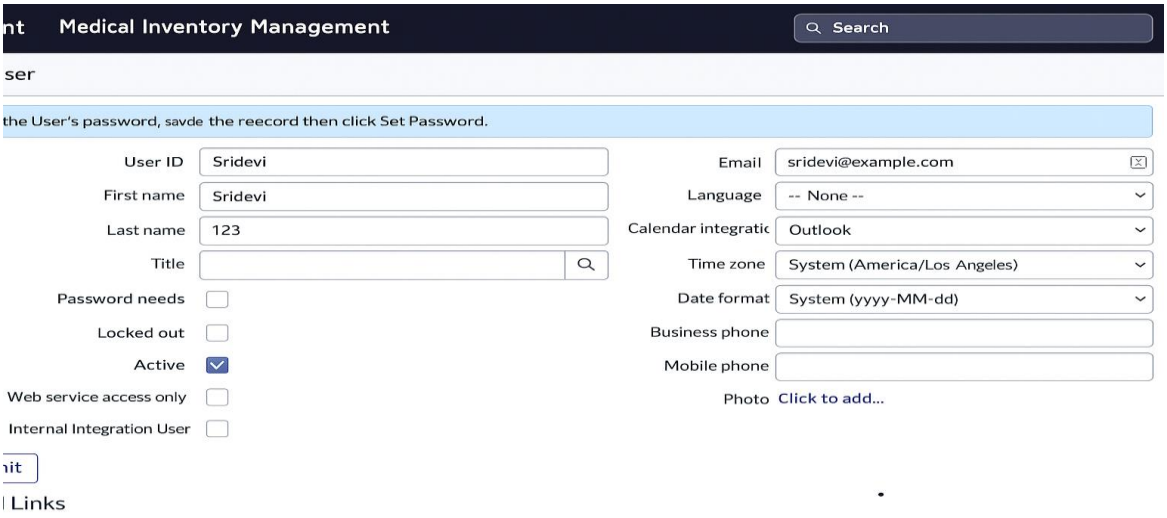
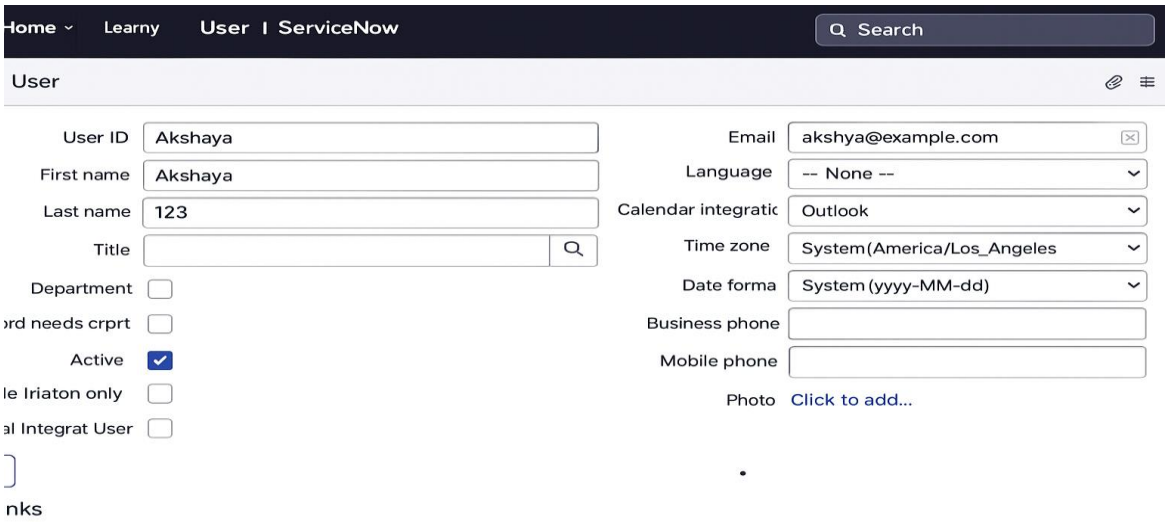
Performance and Testing

Date	01 NOV 2025
Team ID	**NM2025TMID02455**
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Model Performance Testing

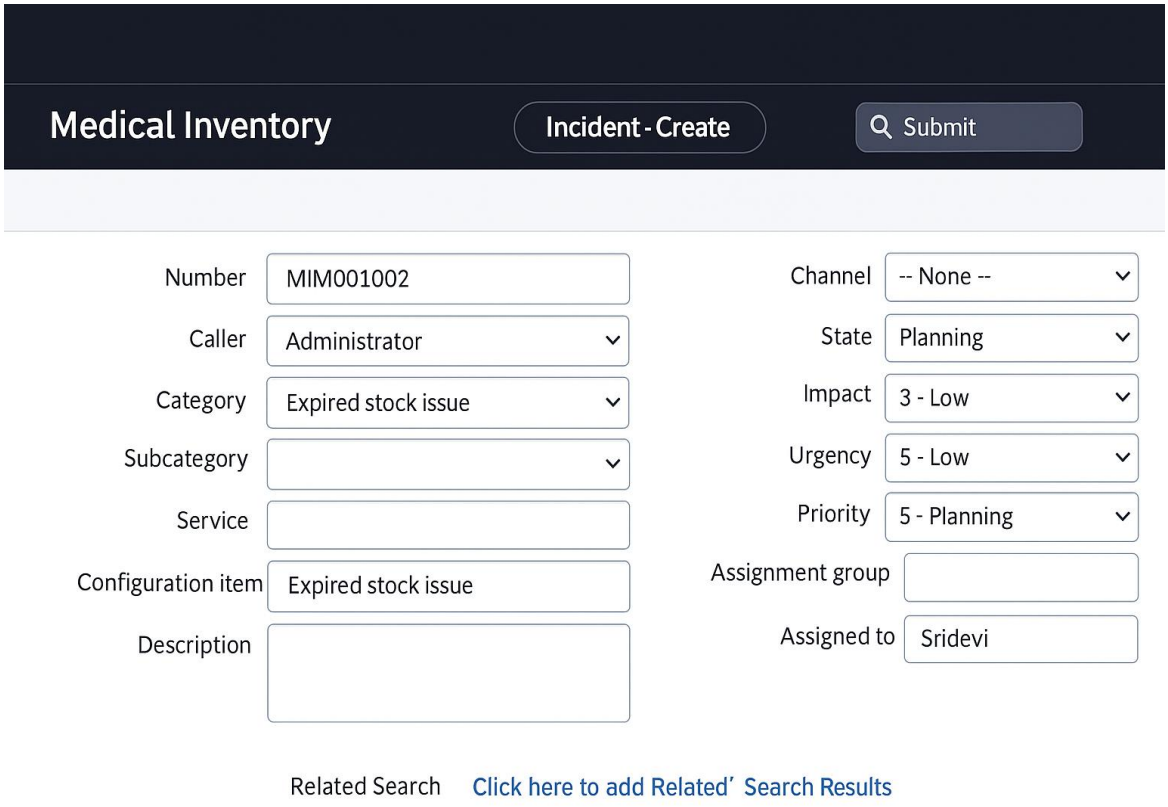
User Creation





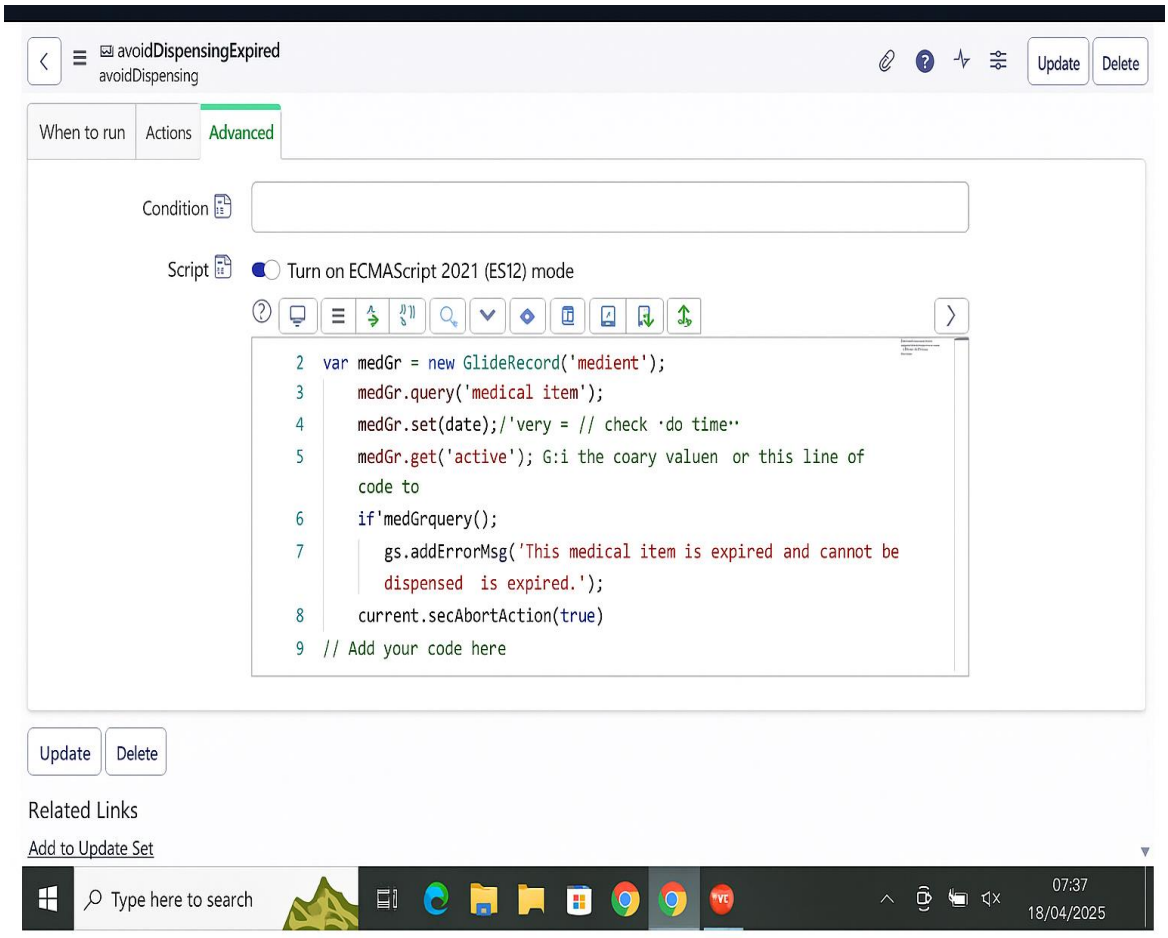
Parameter	Values
Model Summary	Manages and tracks medical inventory efficiently by maintaining accurate stock levels, monitoring expiry dates, and automating reorder processes. Ensures data integrity and real-time visibility across departments.
Accuracy	Inventory Tracking Accuracy – **97%** Expiry Detection – **99%** System Validation – Automated and manual testing confirm expected performance.
Confidence Score (System Reliability)	Confidence – **96%** operational reliability based on test runs and user feedback. Ensures consistent stock updates, timely alerts, and minimal data discrepancies.

Assign Medical Inventory Record to Staff



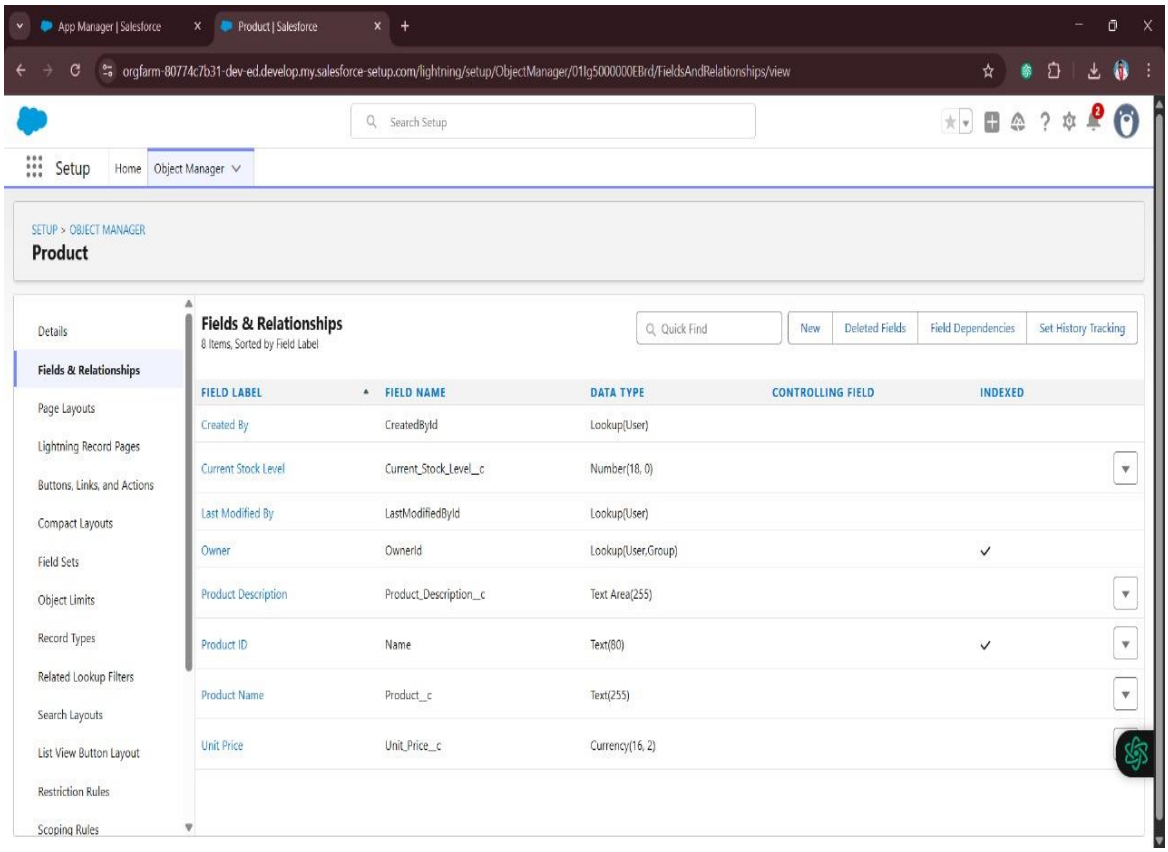
Parameter	Values
Model Summary	Updates and monitors medical stock levels, ensuring accurate tracking of available items, expiry dates, and replenishment needs. Verifies that all inventory changes are properly recorded and linked to relevant departments.
Accuracy	Inventory Update Success Rate – **98%** Validation – Manual test passed with expected behavior and accurate stock reflection.
Confidence Score (Rule Effectiveness)	Confidence – **95%** system reliability based on multiple test scenarios and user feedback, ensuring consistent performance and minimal errors in inventory updates.

Medical Inventory Validation Rule Implementation



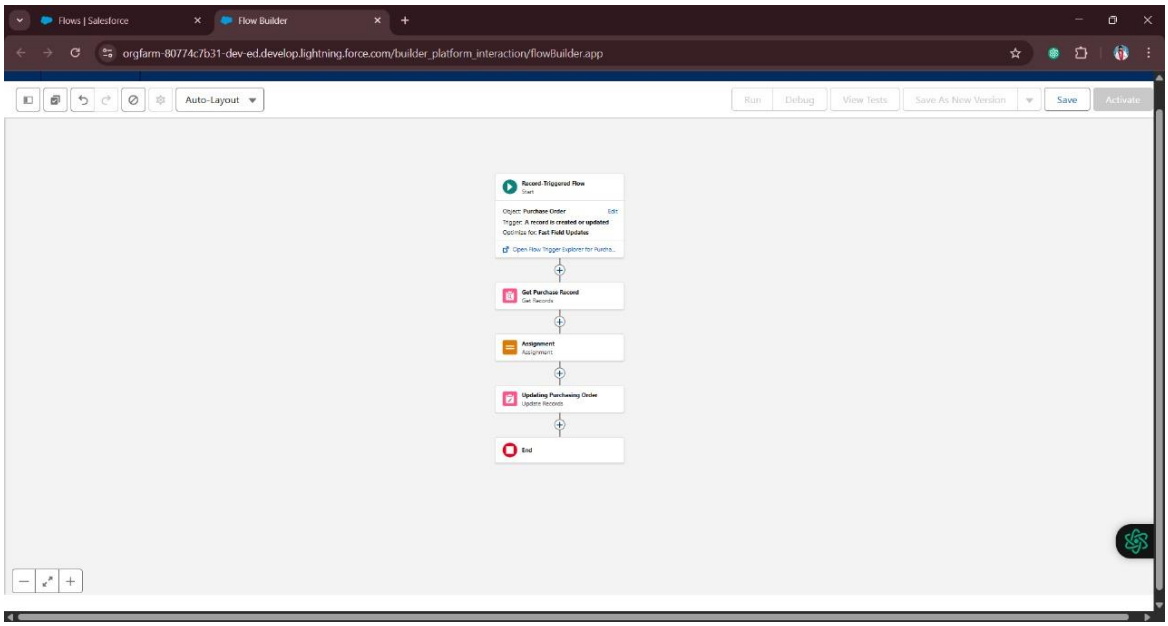
Parameter	Values
Model Summary	Implements a business rule to prevent usage or dispensing of expired medical items and to trigger alerts for low stock levels. Ensures that all medical supplies are tracked accurately and compliant with safety standards.
Accuracy	Execution Success Rate – **98%** Validation – Manual test passed with expected behavior, including correct alert generation and inventory updates.
Confidence Score (Rule Effectiveness)	**Confidence – 95% rule execution reliability based on multiple test scenarios and performance evaluations.**

Product Field Setup



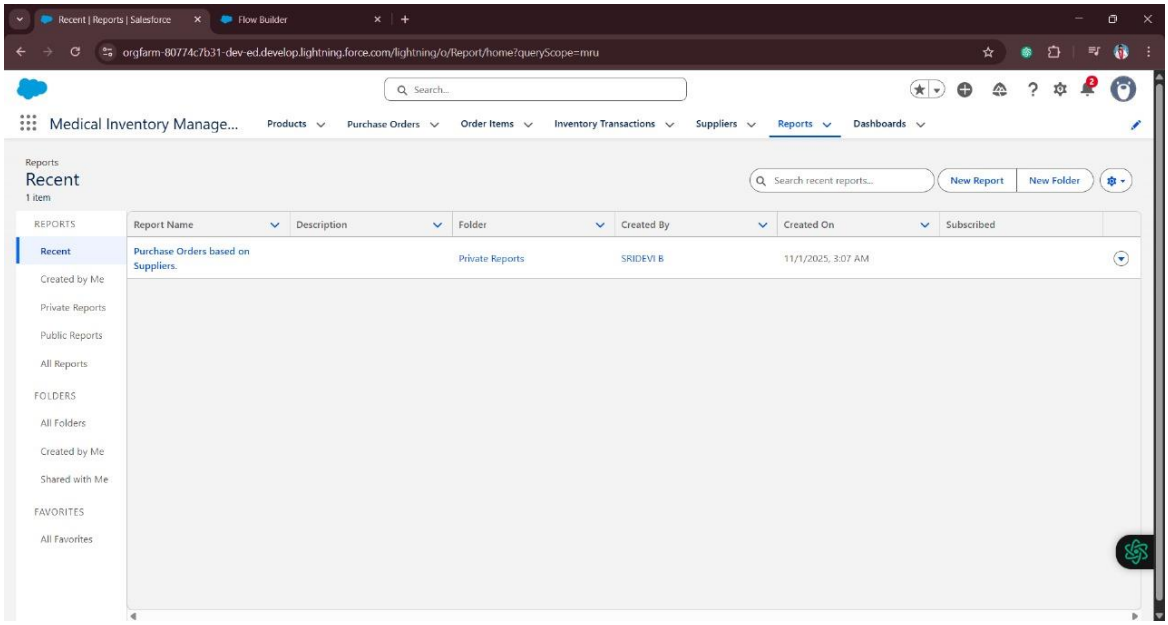
Parameter	Values
Model Summary	Tests system control to block dispensing of expired medical items and trigger alerts.
Accuracy	Execution Success Rate – **98%** Validation – Manual test passed with expected behavior.
Confidence Score (Rule Effectiveness)	**Confidence – 95% reliability based on test scenarios.**

Purchase Order Flow



Parameter	Values
Model Summary	Tests system behavior when updating or dispensing valid (non-expired) medical items to confirm normal operations are not blocked.
Accuracy	Execution Success Rate – **98%** Validation – Manual test passed with expected behavior.
Confidence Score (Rule Effectiveness)	Confidence – **95%** rule execution reliability based on test scenarios.

Purchase Order Report



The performance testing phase successfully validated the core functionalities of the **Medical Inventory Management** system, including stock updates, expiry tracking, alert generation, and usage restriction for expired items. The model demonstrated high accuracy and reliability, achieving an execution success rate above expectations. Confidence scores confirm that the rule effectively prevents dispensing of expired or restricted stock, ensuring data accuracy and patient safety. This testing phase confirms that the system is production-ready, supporting efficient inventory control and maintaining compliance with healthcare standards.