Project Title: Medical Inventory Management System (Salesforce Platform)

Date: November 02, 2025

Team ID: NM2025TMID01274

Maximum Marks: 5 Marks

Phase 4: Project Planning Phase

Product Backlog, Sprint Schedule, and Estimation

Sprint Planning & User Stories

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint- 1	Medical Product Setup	USN-1	As a procurement officer, I can register medical products with descriptions, codes, units of measure, and pricing information.	3	High	Nimmala Durga Mahendra
Sprint- 1	Inventory Location Config	USN-2	As a supply chain manager, I can configure and manage inventory locations (warehouses, departments, surgical suites) with reorder thresholds.	3	High	Regadamilli Sai Sankara Manoj
Sprint- 2	Supplier Management	USN-3	As a procurement manager, I can register suppliers and create automated purchase orders when stock reaches minimum levels.	4	High	Nimmala Durga Mahendra
Sprint- 2	Automated Reorder Alerts	USN-4	As a system admin, I want to create automated flows that trigger reorder alerts when inventory falls below defined thresholds.	4	High	Neelapalli Gowtham
Sprint- 2	Real-Time Stock Tracking	USN-5	As a clinical staff member, I can view real-time stock levels across locations and record product usage with lot tracking.	3	High	Omirajul Sravani
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members

Sprint- 3	Expiry Date Automation	USN-6	As a system admin, I want to create automated notifications for products approaching expiration dates and enforce FEFO inventory rotation.	5	High	Nimmala Durga Mahendra
Sprint- 3	Compliance & Analytics	USN-7	As a healthcare administrator, I can view real-time dashboards showing inventory levels, consumption patterns, costs, and compliance metrics.	4	Medium	Regadamilli Sai Sankara Manoj
Sprint- 4	Mobile Access & Scanning	USN-8	As a clinical staff member, I receive notifications about stock levels and can access inventory information on mobile devices with barcode scanning.	3	Medium	Neelapalli Gowtham
Sprint- 4	System Testing & Validation	USN-9	As a QA tester, I should verify that all features work as expected including automated workflows, data integrity, and integration points.	4	High	Nimmala Durga Mahendra
Sprint- 4	Documentation & Training	USN-10	As a developer, I want to document the system architecture, workflows, user guides, and training materials for stakeholders and end-users.	3	Medium	Regadamilli Sai Sankara Manoj

Sprint Schedule & Progress

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint- 1	6	6 Days	02 Nov 2025	08 Nov 2025	6	08 Nov 2025
Sprint- 2	11	7 Days	09 Nov 2025	16 Nov 2025	11	16 Nov 2025
Sprint- 3	9	7 Days	17 Nov 2025	24 Nov 2025	9	24 Nov 2025
Sprint- 4	10	7 Days	25 Nov 2025	02 Dec 2025	10	02 Dec 2025

Total Story Points: 36

Total Duration: 27 Days

Project Tracker, Velocity & Burndown Chart Velocity Calculation

Average velocity = (Total Story Points Completed) / (Total Duration in Days)

Total: 36 points over 27 days → Velocity = 1.33 points/day

This velocity metric reflects realistic estimation based on team capacity, ensuring all tasks can be completed within planned timelines while maintaining high quality standards.

Burndown Chart Concept

A burndown chart is a graphical representation of work left to do versus time. It is used in agile methodologies such as Scrum to track sprint progress. The chart visualizes whether the team is on track to complete all work by the planned sprint end date. As work is completed, the remaining story points decrease, ideally approaching zero by the sprint conclusion.

For the Medical Inventory Management System:

- **Sprint-1:** 6 points → 0 remaining (completed by 08 Nov)
- **Sprint-2:** 11 points → 0 remaining (completed by 16 Nov)
- **Sprint-3:** 9 points → 0 remaining (completed by 24 Nov)
- **Sprint-4:** 10 points → 0 remaining (completed by 02 Dec)

Key Deliverables by Sprint

Sprint	Deliverable
Sprint-1	Medical product configuration module operational; inventory location setup complete with reorder threshold configuration; initial testing completed
Sprint-2	Supplier management and automated purchase order generation working end-to-end; real-time stock tracking module live; reorder alert flows tested and validated
Sprint-3	Automated expiry date notifications and FEFO rotation logic enforced; compliance and analytics dashboards visible to all stakeholders; audit trails functioning
Sprint-4	Mobile notifications and barcode scanning features live; complete system tested with 98% success rate; comprehensive documentation and training materials ready for deployment

Risk Management & Mitigation

Risk	Probability	Impact	Mitigation Strategy
Salesforce API rate limits during highvolume inventory operations	Medium	High	Implement batch processing and asynchronous flows to handle peak loads smoothly
Risk	Probability	Impact	Mitigation Strategy
Staff availability and training delays	High	Medium	Pre-schedule training sessions; create detailed user guides; provide on-demand support hotline
Data quality issues from manual product entry	Medium	Medium	Implement validation rules; provide data entry training; use barcode scanning to reduce manual errors
Integration delays with EHR systems and supplier platforms	Low	High	Start integrations early; establish early communication with vendor partners; have manual fallback processes

System performance degradation with large inventory datasets	Medium	High	Optimize database queries; implement archival strategy for historical data; perform load testing

Team Responsibilities & Resource Allocation

Team Members & Roles

Nimmala Durga Mahendra (Team Lead - Salesforce Administrator)

- Medical product configuration and object design
- Inventory location setup and reorder threshold configuration
- Automated expiry date notifications and FEFO logic implementation
- System testing and validation coordination
- Documentation and go-live support

Regadamilli Sai Sankara Manoj (Business Analyst)

- Supplier management workflow design
- Requirements gathering from healthcare stakeholders
- Dashboard and analytics development
- Compliance reporting setup
- Training material creation and user documentation

Neelapalli Gowtham (Salesforce Developer)

- Automated reorder alert flow development
- Purchase order automation implementation
- Mobile notifications and barcode scanning integration
- API integration with EHR systems and supplier platforms
- Integration testing and troubleshooting

Omirajul Sravani (QA Engineer)

- Real-time stock tracking validation
- System feature testing and quality assurance
- User acceptance testing (UAT) coordination
- Performance and load testing
- Defect tracking and resolution support

Success Criteria

✅ **All 36 story points completed within 27-day timeline.**

✅ **98%+ system uptime during pilot phase.**

✅ **Zero data loss incidents; all business rules functioning as designed.**

✅ **Minimum 100 medical products successfully registered and tracked.**

✅ **Minimum 5 inventory locations configured with real-time tracking operational.**

✅ **Minimum 50 automated reorder alerts triggered successfully in pilot month.**

✅ **User satisfaction score ≥ 4.5/5.0 from healthcare administrators, clinical staff, and procurement team.**

✅ **All compliance and audit trail requirements met; 100% traceability of inventory transactions.**

Conclusion

The project planning phase outlines a structured, 27-day agile sprint schedule to deliver the Medical Inventory Management System on Salesforce. With a total of 36 story points distributed across 4 sprints, clear team responsibilities, defined deliverables, and comprehensive risk mitigation strategies, the project is positioned for successful delivery. The velocity metric of 1.33 points/day ensures realistic timelines based on team capacity and complexity of tasks.

The combination of experienced Salesforce professionals, structured agile methodology, and detailed resource allocation maximizes the probability of on-time, high-quality delivery. Upon completion, the system will deliver measurable benefits including reduced stockouts, minimized waste, enhanced compliance, operational efficiency improvements, and ultimately stronger patient safety and healthcare operational excellence.