CRM Application for Jewel Management - Developer

Project Title: CRM Application for Jewel Management - Developer

Date: November 07, 2025

Team ID: NM2025TMID08373

Maximum Marks: 5 Marks

Phase 4: Project Planning Phase

Product Backlog, Sprint Schedule, and Estimation

The comprehensive project planning phase establishes a detailed roadmap for developing the jewelry management CRM application using Agile Scrum methodology. The backlog comprises 18 user stories distributed across 8 sprints spanning 46 calendar days, with a total of 72 story points representing the overall project scope and complexity.

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Customer Management	USN-1	As a sales associate, I can create and update customer profiles with comprehensive contact details and personal preferences.	3	High	Developer 1
Sprint-1	Customer Portal Setup	USN-2	As a customer, I can register and log into a secure portal to view complete purchase history and order status.	4	High	Developer 2
Sprint-2	Inventory Module	USN-3	As a store manager, I can add jewelry items with detailed specifications including metal type, gemstones, weight, and certifications.	5	High	Developer 1
Sprint-2	Inventory Valuation	USN-4	As a store owner, I can view real-time inventory valuation and comprehensive stock levels across multiple store locations.	3	High	Developer 3
Sprint-2	Barcode Integration	USN-5	As a sales associate, I can scan barcodes to efficiently check in/out inventory items with automatic stock updates.	4	Medium	Developer 2

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Custom Order Workflow	USN-6	As a sales associate, I can create detailed custom order requests with comprehensive design specifications and customer requirements.	5	High	Developer 1
Sprint-3	Order Tracking	USN-7	As a customer, I can track the real-time progress of my custom order through detailed production milestones.	4	High	Developer 2
Sprint-3	Production Management	USN-8	As a production manager, I can assign custom orders to skilled artisans and update completion status with progress notes.	3	Medium	Developer 3
Sprint-4	Sales Pipeline	USN-9	As a sales manager, I can view and manage sales opportunities through defined pipeline stages with probability scoring.	4	High	Developer 1
Sprint-4	Quote Generation	USN-10	As a sales associate, I can generate dynamic quotes for customers including pricing options, flexible financing, and trade-in valuations.	4	High	Developer 2
Sprint-5	Marketing Automation	USN-11	As a marketing manager, I can create sophisticated automated email campaigns for birthdays, anniversaries, and new collection announcements.	4	Medium	Developer 3
Sprint-5	Customer Segmentation	USN-12	As a marketing manager, I can segment customers intelligently based on purchase history and personal preferences for targeted campaigns.	3	Medium	Developer 1
Sprint-6	Data Protection Rules	USN-13	As a system admin, I want to create intelligent business rules that prevent unauthorized deletion of customers with active orders.	5	High	Developer 2
Sprint-6	Security & Access Control	USN-14	As a system admin, I can configure role-based permissions ensuring staff access restrictions to sensitive pricing and customer data.	4	High	Developer 3
Sprint-7	Dashboards & Reports	USN-15	As a store owner, I can view comprehensive dashboards showing sales performance metrics, inventory valuation, and customer analytics.	5	High	Developer 1

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-7	Mobile Optimization	USN-16	As a sales associate, I can access customer profiles and real-time inventory from mobile devices during floor consultations.	4	Medium	Developer 2
Sprint-8	Testing & UAT	USN-17	As a QA tester, I should verify that all features work correctly with real jewelry store operational data and edge cases.	5	High	All Team
Sprint-8	Documentation & Training	USN-18	As a store manager, I need comprehensive user guides and detailed training materials for staff onboarding and continuous support.	3	Medium	Developer 3

Sprint Schedule & Progress Timeline

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint-1	7	5 Days	01 Nov 2025	06 Nov 2025	7	06 Nov 2025
Sprint-2	12	7 Days	07 Nov 2025	14 Nov 2025	12	14 Nov 2025
Sprint-3	12	7 Days	15 Nov 2025	22 Nov 2025	12	22 Nov 2025
Sprint-4	8	5 Days	23 Nov 2025	28 Nov 2025	8	28 Nov 2025
Sprint-5	7	5 Days	29 Nov 2025	04 Dec 2025	7	04 Dec 2025
Sprint-6	9	6 Days	05 Dec 2025	11 Dec 2025	9	11 Dec 2025
Sprint-7	9	6 Days	12 Dec 2025	18 Dec 2025	9	18 Dec 2025
Sprint-8	8	5 Days	19 Dec 2025	24 Dec 2025	8	24 Dec 2025
TOTAL	**72**	**46 Days**			**72**	

Average Velocity = 1.57 story points/day (Total: 72 points over 46 days)

Project Tracker, Velocity & Burndown Analysis

Velocity Calculation

The project team has established a consistent velocity of 1.57 story points per day, calculated by dividing the total story points completed (72) by the total project duration (46 days). This metric provides a reliable baseline for sprint planning and helps ensure realistic timeline estimations throughout the project lifecycle. The velocity accounts for typical development challenges specific to jewelry retail systems, including complex data model requirements and comprehensive testing needs.

Burndown Chart Interpretation

A burndown chart visualizes the cumulative completion of story points against the project timeline, demonstrating whether the development team maintains pace to deliver all planned features within the scheduled timeline. The ideal burndown line slopes steadily downward as each sprint completes its assigned work, with the actual burndown tracking closely to this ideal trajectory. This visualization tool enables project managers to identify potential delays early and implement corrective measures if the actual progress deviates significantly from planned progress.

Key Deliverables by Sprint

Sprint	Deliverable Description
Sprint-1	Fully operational customer management system with secure portal registration and purchase history visibility
Sprint-2	Complete inventory tracking module with barcode/RFID scanning integration and real-time valuation capabilities
Sprint-3	Comprehensive custom order workflow with customer-facing tracking and production milestone management
Sprint-4	Advanced sales pipeline management with quote generation and trade-in valuation processing
Sprint-5	Intelligent marketing automation engine with customer segmentation and campaign orchestration
Sprint-6	Robust security framework with role-based access controls and comprehensive data protection business rules
Sprint-7	Executive-level business dashboards and comprehensive mobile optimization for field staff
Sprint-8	Fully tested and documented system ready for production deployment with complete staff training

Team Responsibilities & Resource Allocation

Developer 1 (Lead Developer - Specialization: Backend Architecture & Pipeline Management)

- Primary Responsibilities: Customer management system design, custom order workflow architecture, sales pipeline and opportunity management, comprehensive dashboard and

reporting module development

- Expertise: Salesforce platform architecture, data modeling, complex workflow design, reporting and analytics configuration
- Estimated Allocation: 40% of total project effort

Developer 2 (CRM Specialist - Specialization: Frontend & Integration Development)

- Primary Responsibilities: Customer portal development, inventory barcode integration implementation, quote generation engine, data protection rules configuration, mobile optimization for responsive user experience
- Expertise: Salesforce Experience Cloud customization, external system integrations, mobile development, user experience optimization
- Estimated Allocation: 35% of total project effort

Developer 3 (Automation Expert - Specialization: Business Logic & Security Implementation)

- Primary Responsibilities: Inventory valuation automation, production management workflows, sophisticated marketing automation campaign orchestration, comprehensive security and access control configuration
- Expertise: Process automation, business rule implementation, advanced formula design, security architecture
- Estimated Allocation: 25% of total project effort

Risk Management & Mitigation Strategies

Risk Factor	Probability	Impact	Mitigation Strategy
Complex jewelry specifications may not fit standard data model	Medium	High	Conduct detailed requirements workshop with jewelry industry experts; implement flexible custom fields and extensible metadata framework
Integration challenges with barcode/RFID hardware from multiple vendors	Medium	Medium	Establish testing partnerships with multiple hardware manufacturers; develop manual entry fallback mechanisms
Data migration complexity from legacy systems	High	High	Allocate significant time for comprehensive data cleansing and validation; implement automated validation rules and data quality checks
User adoption challenges with non-technical jewelry retail staff	High	Medium	Provide extensive comprehensive training programs; create simplified intuitive mobile interface; establish ongoing support resources
Security vulnerabilities with high-value inventory data	Medium	High	Implement multi-factor authentication; deploy strong encryption protocols; maintain detailed audit logging for all transactions

Success Criteria & Completion Standards

- ✓ All 72 story points successfully completed within the planned 46-day timeline

- ✓ System accurately manages and tracks 1000+ jewelry items with complete specifications

- ✓ Achieve 95% reduction in manual data entry requirements for inventory management operations

- ✓ Attain customer satisfaction score of 4.5/5.0 or higher for order tracking portal usability

- ✓ Enable sales staff to access complete customer data on mobile devices in less than 3 seconds

- ✓ Achieve zero data loss incidents with all business rules functioning correctly

- ✓ Successfully train 90% of store staff with daily active system usage within 2 weeks post-launch

- ✓ Deliver positive return on investment (ROI) within 6 months through measurable shrinkage reduction and increased sales revenue

Conclusion

The project planning phase establishes a comprehensive 46-day development roadmap utilizing Agile Scrum methodology to deliver a fully functional jewelry management CRM application. With clearly defined 18 user stories distributed across 8 focused sprints totaling 72 story points, well-allocated team responsibilities, and robust risk mitigation strategies, the initiative is strategically positioned for successful delivery. The calculated velocity of 1.57 points per day ensures realistic timeline estimations while the phased sprint-based approach enables iterative feedback collection and continuous refinement throughout the development lifecycle, ultimately delivering a solution specifically optimized for jewelry retail operations.