Phase 4: Project Planning Phase

Project Title: CRM Application for Jewel Management - Developer

Date: November 01, 2025

Team ID: NM2025TMID02152

Maximum Marks: 5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

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 contact details and preferences.	3	High	Developer 1
Sprint-1	Customer Portal Setup	USN-2	As a customer, I can register and log into a portal to view my purchase history.	4	High	Developer 2
Sprint-2	Inventory Module	USN-3	As a store manager, I can add jewelry items with detailed specifications (metal, stones, weight, certifications).	5	High	Developer 1
Sprint-2	Inventory Valuation	USN-4	As a store owner, I can view real-time inventory valuation and stock levels across locations.	3	High	Developer 3
Sprint-2	Barcode Integration	USN-5	As a sales associate, I can scan barcodes to check in/out inventory items.	4	Medium	Developer 2
Sprint-3	Custom Order Workflow	USN-6	As a sales associate, I can create custom order requests with design specifications and customer requirements.	5	High	Developer 1
Sprint-3	Order Tracking	USN-7	As a customer, I can track the progress of my custom order through production milestones.	4	High	Developer 2
Sprint-3	Production Management	USN-8	As a production manager, I can assign custom orders to artisans and update completion status.	3	Medium	Developer 3

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Sales Pipeline	USN-9	As a sales manager, I can view and manage sales opportunities through pipeline stages.	4	High	Developer 1
Sprint-4	Quote Generation	USN-10	As a sales associate, I can generate quotes for customers including pricing, financing options, and trade-in values.	4	High	Developer 2
Sprint-5	Marketing Automation	USN-11	As a marketing manager, I can create automated email campaigns for birthdays, anniversaries, and new collections.	4	Medium	Developer 3
Sprint-5	Customer Segmentation	USN-12	As a marketing manager, I can segment customers based on purchase history and preferences for targeted campaigns.	3	Medium	Developer 1
Sprint-6	Data Protection Rules	USN-13	As a system admin, I want to create business rules that prevent deletion of customers with active orders and historical sales.	5	High	Developer 2
Sprint-6	Security & Access Control	USN-14	As a system admin, I can configure role-based permissions for staff access to pricing and customer data.	4	High	Developer 3
Sprint-7	Dashboards & Reports	USN-15	As a store owner, I can view dashboards showing sales performance, inventory valuation, and customer analytics.	5	High	Developer 1
Sprint-7	Mobile Optimization	USN-16	As a sales associate, I can access customer profiles and 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 data.	5	High	All Team
Sprint-8	Documentation & Training	USN-18	As a store manager, I need user guides and training materials for staff onboarding.	3	Medium	Developer 3

Project Tracker, Velocity & Burndown Chart (4 Marks)

Sprint Schedule & Progress

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 Story Points: 72	Total Duration: 46 Days**					

Velocity Calculation

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

Total: 72 points over 46 days → Velocity = 1.57 points/day

Burndown Chart

A burndown chart tracks remaining work (story points) versus time throughout the project. It visualizes whether the development team is on pace to complete all planned features by the target completion date. The ideal burndown line slopes steadily downward as sprints are completed, with the actual burndown tracking closely to this ideal trajectory.

Team Responsibilities & Resource Allocation

Team Members & Roles

- **Developer 1** (Lead Developer): Customer management, custom orders, sales pipeline, dashboards

- **Developer 2** (CRM Specialist): Customer portal, inventory barcode integration, quote generation, data protection, mobile optimization

- **Developer 3** (Automation Expert): Inventory valuation, production management, marketing automation, security configuration

Key Deliverables by Sprint

Sprint	Deliverable
Sprint-1	Customer management and portal operational
Sprint-2	Inventory tracking with barcode scanning and valuation
Sprint-3	Custom order workflow with customer tracking
Sprint-4	Sales pipeline and quote generation
Sprint-5	Marketing automation campaigns
Sprint-6	Security controls and data protection
Sprint-7	Business dashboards and mobile access
Sprint-8	Fully tested system with documentation

Risk Management & Mitigation

Risk	Probability	Impact	Mitigation Strategy
Complex jewelry specifications may not fit standard data model	Medium	High	Conduct detailed requirements workshop with jewelers; use flexible custom fields
Integration with barcode/RFID hardware	Medium	Medium	Test with multiple hardware vendors; have manual entry fallback
Data migration from legacy systems	High	High	Allocate extra time for data cleansing; implement validation rules
User adoption by non-technical jewelry staff	High	Medium	Provide extensive training; create simplified mobile interface
Security concerns for high-value inventory data	Medium	High	Implement multi-factor authentication; encryption; audit logging

Success Criteria

- ✅ All 72 story points completed within 46-day timeline
- ✅ System accurately tracks 1000+ jewelry items with full specifications
- ✅ 95% reduction in manual data entry for inventory management
- ✅ Customer satisfaction score ≥ 4.5/5.0 for order tracking portal
- ✅ Sales staff can access customer data on mobile in <3 seconds
- ✅ Zero data loss incidents; all business rules functioning correctly
- ✅ 90% of staff successfully trained and using system daily
- ✅ ROI positive within 6 months through reduced shrinkage and increased sales

Conclusion

The project planning phase establishes a comprehensive 46-day development roadmap for the jewelry management CRM application. With 72 story points distributed across 8 focused sprints, clear team responsibilities, and robust risk mitigation strategies, the project is positioned for successful delivery. The velocity metric of 1.57 points/day ensures realistic timelines while the phased approach allows for iterative feedback and refinement of features specific to jewelry retail operations.