Loaning Management System Project Plan (Fanders Microfinance Inc.)

This plan structures the development of the Loaning Management System (LMS) into three distinct phases, based on the requirements priority defined in the specification document. The technology stack is PHP/MySQL.

Phase 1: Core Financial Automation (High Priority)

Goal: Establish the foundational data structures and automate the most critical, error-prone processes (Loan Creation, Calculation, and Immediate Payment Processing) to replace manual Excel operations.

Feature Group	Functional Requirements (FR)	Key Implementation Steps & Services	Database Focus
1. Authentication & Security	Section 1, 7	Implement User Login, Session Management, and Role-Based Access (Admin, Manager, Cashier). Use AuthService and PasswordHash.	users table
2. Client Management	Section 4	Implement **Create, View, and Update** Client accounts.	clients table
3. Loan Creation & Scheduling	FR-001, FR-002, FR-003	**Build LoanCalculationService:** Implement the logic for Principal x 0.05 x 4 interest calculation and the fixed ₱425 insurance fee. Automatically generate the	loans table

		17-week payment schedule upon approval.	
4. Payment Processing	FR-004, FR-005	**Build PaymentService:** Implement recording of weekly payments and real-time calculation of the Outstanding Balance. This is the core transactional function.	payments table
5. Initial Dashboard	Section 2	Build the basic dashboard view for Cashiers and Managers showing active loan counts and real-time balance updates.	users, loans

Phase 2: Cash Flow & Operational Oversight (Medium Priority)

Goal: Integrate the Cash Flow Management features, formalize operational documentation (SLR/Collection Sheets), and implement management oversight tools.

Feature Group	Functional Requirements (FR)	Key Implementation Steps & Services	Database Focus
1. Digital Cash Blotter	FR-004, FR-006	**Build CashBlotterService:** Implement the digital equivalent of the daily cash blotter,	cash_blotter table

		summarizing all inflows (payments) and outflows (loan releases) daily.	
2. Loan Release Documentation	FR-007	Implement the **SLR (Summary of Loan Release) Document** process. Records the disbursement and updates the cash_blotter for outflow. Uses SlrDocumentServic e.	slr_documents table (Assumed)
3. Collection Sheet Integration	FR-006	Implement the **Collection Sheet** process for Account Officers to submit payments, which Cashiers then post (FR-004). Uses CollectionSheetSer vice.	collection_sheets table (Assumed)
4. Overdue Alerts	FR-012	Implement logic to automatically flag loans as **Overdue** and generate alerts for staff/managers.	loans table
5. Audit Trail	FR-010	Implement comprehensive logging of all critical actions (loan creation, payment entry, user changes) to the transactions table	transactions table

		using TransactionService.	

Phase 3: Reporting, Administration, & Final Polish (High/Medium Priority)

Goal: Deliver the final, polished system with essential financial reporting, full admin controls, and robust security features, making the system ready for deployment.

Feature Group	Functional Requirements (FR)	Key Implementation Steps & Services	Database Focus
1. Comprehensive Reporting	FR-005	**Build ReportService:** Implement functionality to generate balanced financial statements and analytics. Include PDF/Excel export capabilities (using PDFGenerator).	All tables (loans, payments, cash_blotter)
2. Full Admin Management	Section 6	Implement the Administrator module (public/admins/) to manage Manager, Cashier, and Account Officer accounts, including password resets and deactivation.	users table
3. Security & Compliance	UR-008, Section 7	Implement the secure, **Automated Backup** strategy (cloud storage	External backup storage

		solution). Finalize role-based access checks across all public endpoints.	
4. UX/UI Polish	NFRs	Apply consistent and responsive styling across all front-end pages (public/assets/css/). Implement user-friendly navigation (templates/layout/navbar.php).	N/A

Key Deliverables Summary

Phase	Core Functional Deliverables
1	User Authentication, Client CRUD, Loan Creation with Automated Calculations, Payment Recording, Basic Dashboards.
2	Digital Cash Blotter, Loan Release (SLR) System, Collection Sheet Processing, Overdue Alerts, Comprehensive Audit Trail.
3	Full Financial Reporting (PDF/Excel), Administrator User Management, Automated Backup, Final System Polish.