Terms of Reference (ToR)

Project Title: Financial Management System (FMS)

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1. Background

Managing personal and institutional finances manually leads to errors, inefficiencies, and lack of transparency. The Financial Management System (FMS) aims to address these issues by digitizing and automating tasks such as user management, loan calculation, interest handling, accounting entries, and financial reporting.

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2. Objectives

- Develop a secure system to manage users/clients and their accounts.
- Automate daily tally, accounting journals, and reporting.
- Implement EMI calculation and loan management (Flat and Diminishing).
- Enable SMS banking, tax tracking, and balance sheet preparation.
- Provide an intuitive interface for both administrators and users.

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3. Scope of Work

3.1 Admin Portal

- Admin Login Authentication
- Role-based Access Control

3.2 User Management (CRUD)

- Create, Edit, Update, and Delete Users/Clients

- Assign User Types:
    - SB (Sadaran Bachat)
    - BB (Baal Bachat)
    - MB (Masik Bachat)

3.3 Loan Module

- Loan Types:
    - **Flat Loan**:
        - Interest calculated on original principal
        - Fixed EMI throughout loan period
    - **Diminishing Loan**:
        - Interest calculated on remaining balance
        - Interest portion decreases over time
- Features:
    - EMI calculator
    - Loan application and approval process
    - Interest addition and monthly installment tracking

3.4 Accounting & Financial Reporting

- Journal Entries
- Day Book
- Balance Sheet
- Trial Balance

- Transaction Tallying (Daily Basis)

3.5 Other Features

- SMS Notifications (SMS Banking)
- Tax Calculation Module
- Printing of Statements and Reports
- Miscellaneous Expense Tracking

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4. Deliverables

- Fully functional web-based Financial Management System
- Source code and deployment instructions
- Admin/User manuals and documentation
- Test cases and test reports
- Final project report with findings and lessons learned

DETAIL

3.1 Admin Portal

a. Admin Login Authentication Page
* **Layout:** Centered login form on a clean background.
* **Elements:**
* Application Logo (top)
* Title: "Admin Login" or "FMS Login"
* Input Field: "Username" or "Email"
* Input Field: "Password" (with show/hide toggle)
* Button: "Login"
* Link: "Forgot Password?" (optional)
* **Design Notes:** Simple, secure, and professional.

b. Admin Dashboard (Post-Login) / Role-based Access Control Overview
* **Layout:**
* **Header:** Application Logo, Search Bar (global search if needed), User Profile icon (with logout option).
* **Sidebar Navigation:** Links to major modules (User Management, Loan Module, Accounting, Reports, Settings, etc.). Icons can enhance usability. What's visible here depends on the admin's role.
* **Main Content Area:**
* **Welcome Message:** "Welcome, [Admin Name]!"
* **Key Metrics/KPIs (Cards/Widgets):**
* Total Users
* Pending Loan Applications
* Total Loan Disbursed
* Recent Transactions/Journal Entries
* **Quick Actions:** Buttons or links to common tasks (e.g., "Add New User," "View Pending Loans").
* **Recent Activity Feed:** (Optional)
* **Design Notes:** Provide a high-level overview and quick access to important functions. Customize widgets based on admin role.

3.2 User Management (CRUD)

a. User Listing Page (Admin View)
* **Layout:** Main content area within the admin dashboard.
* **Elements:**
* Page Title: "User Management" or "Clients"
* Button: "+ Add New User" (prominently placed)
* Search Bar: Filter users by name, ID, user type, etc.
* Filters: Dropdowns for "User Type" (SB, BB, MB), Status.
* **Table of Users:**
* Columns: User ID, Full Name, User Type, Email/Phone, Date Joined, Status (Active/Inactive), Actions.
* Actions Column: Icons/buttons for "Edit," "View Details," "Delete" (with confirmation), "Manage Account."
* Pagination: If many users.
* **Design Notes:** Clean table layout, easy to scan. Actions should be clear.

b. Create/Edit User Form (Modal or Separate Page)
* **Layout:** A structured form.
* **Elements:**
* Form Title: "Create New User" or "Edit User: [User Name]"
* Input Fields:
* Full Name
* Contact Number
* Email Address
* Physical Address
* Date of Birth
* ID/Document Upload (if applicable)
* User Type (Dropdown: SB, BB, MB)
* Account Number (auto-generated or manual)
* Initial Deposit (if applicable)
* Password (for user login, if they have direct access)
* Status (Dropdown: Active, Inactive)
* Buttons: "Save User" / "Update User," "Cancel"
* **Design Notes:** Group related fields. Use clear labels and validation messages.

3.3 Loan Module

a. Loan Application Form (User-facing, or Admin entering on behalf of user)
* **Layout:** Multi-step form if complex, or a single well-organized page.
* **Elements:**
* Page Title: "Apply for Loan" or "New Loan Application"
* Applicant Details (pre-filled if logged in, or searchable if admin is applying for a client)
* Loan Details Section:
* Loan Type (Dropdown: Flat Loan, Diminishing Loan)
* Loan Amount (Input)
* Loan Purpose (Dropdown or Text Area)
* Desired Tenure (Input in months/years)
* Interest Rate (might be auto-populated based on loan type/scheme, or admin input)
* EMI Calculator (Embedded or linked): Allows user/admin to see estimated EMI based on inputs.
* Document Upload Section: For ID, income proof, collateral (if any).
* Declaration/Consent Checkbox.
* Buttons: "Calculate EMI" (if calculator is integrated), "Submit Application," "Save as Draft."
* **Design Notes:** Guide the user. Clearly show required fields. Provide information tooltips for terms like "Flat Loan" vs. "Diminishing Loan."

b. Loan Listing & Approval Page (Admin View)
* **Layout:** Similar to User Listing page.
* **Elements:**
* Page Title: "Loan Applications"
* Filters: By Loan Type, Status (Pending, Approved, Rejected, Disbursed), Date Range.
* Search Bar: By Applicant Name, Loan ID.
* **Table of Loan Applications:**
* Columns: Loan ID, Applicant Name, Loan Type, Amount, Tenure, Applied Date, Status, Actions.
* Actions Column: "View Details," "Approve," "Reject," "Process Disbursement."
* Pagination.
* **Design Notes:** Color-coding for status can be helpful (e.g., yellow for pending, green for approved, red for rejected).

c. Loan Details Page (Admin & potentially User View)
* **Layout:** Summary and detailed breakdown.
* **Elements:**
* Loan ID, Applicant Info.
* Loan Summary: Type, Amount, Interest Rate, Tenure, EMI Amount, Total Payable, Disbursed Date, Status.
* **Installment Schedule Table (Amortization Table):**

* Columns: Installment #, Due Date, Principal, Interest, EMI, Remaining Balance, Payment Status.
* Payment History.
* Documents Attached.
* Actions (Admin): "Add Payment," "Reschedule," "Close Loan."
* Actions (User): "Make Payment" (if online payments enabled), "Download Statement."
* **Design Notes:** Clear presentation of the amortization schedule is crucial.

d. EMI Calculator (Standalone or Integrated)
* **Layout:** Simple form with results display.
* **Elements:**
* Title: "EMI Calculator"
* Input Field: "Loan Amount"
* Input Field: "Annual Interest Rate (%)"
* Input Field: "Loan Tenure (in months or years)"
* Button: "Calculate"
* **Results Display Area:**
* Monthly EMI: [Calculated Value]
* Total Interest Payable: [Calculated Value]
* Total Payment (Principal + Interest): [Calculated Value]
* (Optional) Pie chart showing Principal vs. Interest.
* (Optional) Link to view full amortization schedule.
* **Design Notes:** Interactive sliders for amount/tenure can enhance user experience.

3.4 Accounting & Financial Reporting

a. Journal Entries Page (Admin View)
* **Layout:**
* Button: "+ New Journal Entry"
* Filters: Date Range, Entry ID.
* **Table of Journal Entries:**
* Columns: Entry ID, Date, Narration, Debit Accounts, Debit Amounts, Credit Accounts, Credit Amounts, Posted By.
* Actions: "View," "Edit" (if allowed), "Reverse Entry" (with caution).
* **New/Edit Journal Entry Form (Modal or Page):**
* Date (default to today)
* Narration (Text Area)

* Rows for Debit/Credit:
* Account (Dropdown/Searchable list of Chart of Accounts)
* Debit Amount
* Credit Amount
* Dynamic addition of more rows for multiple debits/credits.
* Totals for Debit and Credit (must match).
* Buttons: "Post Entry," "Save as Draft."
* **Design Notes:** Ensure totals automatically update and enforce debit=credit rule.

b. Day Book, Balance Sheet, Trial Balance (Report Views - Admin)
* **Layout (General for all reports):**
* Page Title: e.g., "Balance Sheet"
* **Report Criteria/Filters:**
* Date Range Selector (e.g., "As of Date" for Balance Sheet, "From Date" to "To Date" for Day Book/Trial Balance).
* Branch/Department Filter (if applicable).
* Button: "Generate Report"
* Button: "Print"
* Button: "Export" (e.g., to PDF, Excel)
* **Content Display Area:**
* **Day Book:** Chronological list of all transactions (journal entries) for the selected period. Columns: Date, Particulars/Narration, Voucher No., Debit Amount, Credit Amount.
* **Balance Sheet:** Standard format: Assets on one side (or top), Liabilities & Equity on the other (or bottom). Totals must match.
* **Trial Balance:** List of all ledger accounts with their debit or credit balances. Totals for debits and credits must match.
* **Design Notes:** Clean, professional, and easy-to-read tabular data. Clear headings and subtotals. Financial figures should be well-formatted.

c. Transaction Tallying (Daily Basis) - Dashboard/Report View
* **Layout:** Could be part of the Admin Dashboard or a separate report.
* **Elements:**
* Date Selector (default to today)
* Summary Section:
* Total Cash Inflow
* Total Cash Outflow
* Net Cash Position
* Opening Balance

* Closing Balance
* Breakdown of transactions by type (e.g., Loan Repayments, Deposits, Withdrawals, Expenses).
* Comparison with system-generated totals vs. manually entered physical cash (if applicable).
* **Design Notes:** Visual cues (e.g., green for inflow, red for outflow) can be helpful.

3.5 Other Features

a. SMS Notifications (Admin Settings Page)
* **Layout:** Tabbed interface or sections within a "Settings" area.
* **Elements:**
* SMS Gateway Configuration: API Key, Sender ID, etc.
* List of Notification Events (e.g., Loan Approved, EMI Due, Payment Received, New User Welcome).
* For each event:
* Enable/Disable Toggle
* Editable SMS Template (with placeholders like [ClientName], [Amount], [DueDate]).
* Test SMS Functionality.
* SMS Log Viewer.
* **Design Notes:** Clear distinction between configurable templates and system settings.

b. Tax Calculation Module (Could be integrated into Reporting or Admin Settings)
* **If settings:**
* Input fields for current tax rates/slabs (e.g., TDS on interest).
* **If part of reporting:**
* Reports showing interest earned by clients and applicable tax deducted/payable.
* This is highly dependent on specific tax rules.
* **Design Notes:** Simplicity is key. Clearly label all fields and outputs.

c. Printing of Statements and Reports
* This is a feature *of* other pages.
* **Design:**
* A clear "Print" icon/button on relevant pages (Account Statement, Loan Statement, Financial Reports).
* When clicked, it should generate a print-friendly version of the content (often using CSS print stylesheets to hide navigation, buttons, etc., and format for paper).
* Headers and footers on printed documents (e.g., Company Name, Report Title, Page Number, Date Printed).

d. Miscellaneous Expense Tracking (Admin View)
* **Layout:** Similar to Journal Entries or User Listing.
* **Elements:**
* Page Title: "Expense Management"
* Button: "+ Add New Expense"
* Filters: Date Range, Expense Category.
* **Table of Expenses:**
* Columns: Date, Category, Description/Payee, Amount, Paid By, Actions.
* Actions: "Edit," "Delete."
* **New/Edit Expense Form (Modal or Page):**
* Date
* Expense Category (Dropdown: e.g., Rent, Utilities, Stationery, Travel)
* Description/Payee
* Amount
* Payment Method
* Receipt Upload (Optional)
* Buttons: "Save Expense," "Cancel."
* **Design Notes:** Allow easy categorization for reporting.
